February
1984

Baseline Budget Projections for Fiscal Years 1985–1989

A Report to the
Senate and House
Committees on the Budget
—Part II

As Required by Public Law 93-344

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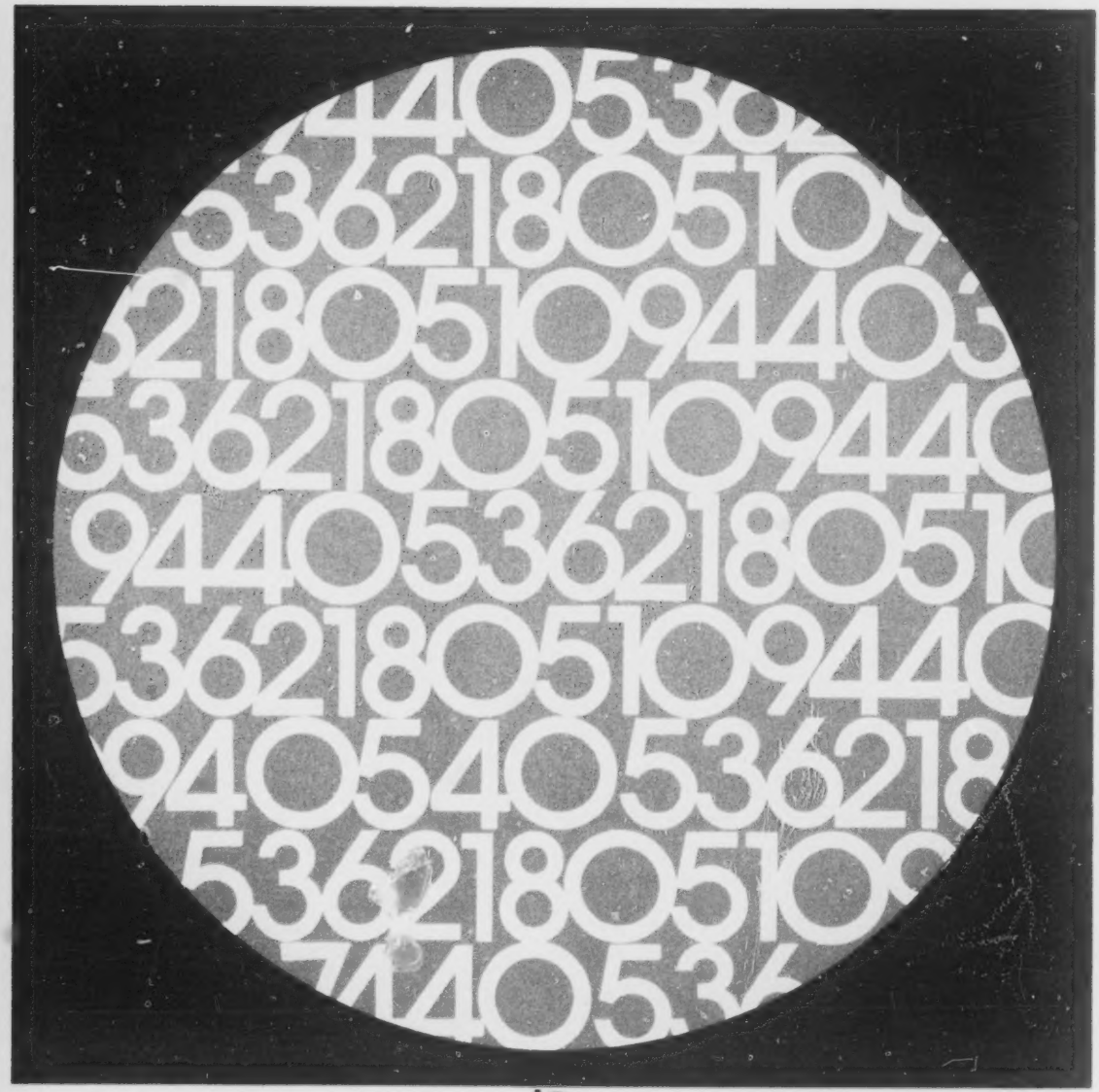

CONGRESS OF THE UNITED STATES

CONGRESSIONAL BUDGET OFFICE

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BASELINE BUDGET PROJECTIONS

FOR FISCAL YEARS 1985–1989

The United States Congress
Congressional Budget Office

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NOTES

Unless otherwise noted, all years referred to in this report are fiscal years.

Details in the text, tables, and figures of this report may not add to the totals because of rounding.

In tables, BA refers to budget authority, while O signifies outlays.

PREFACE

The Congressional Budget Office (CBO) is required by section 202(f) of the Congressional Budget Act of 1974 to submit an annual report on budgetary options to the Senate and House Committees on the Budget. This year, the report is in three parts: Part I is entitled The Economic Outlook; Part II is Baseline Budget Projections for Fiscal Years 1985-1989; and Part III is Reducing the Deficit: Spending and Revenue Options.

Part II of the CBO annual report presents projections of federal revenues and spending that could occur if current laws and policies were to continue unchanged for the next five years. The projections do not represent a forecast of future federal budgets, since those budgets will doubtless include numerous policy changes. They do provide, however, a useful baseline or benchmark against which proposed changes in taxes or spending programs may be measured and assessed. The Congressional Budget Office is required under section 308(c) of the Congressional Budget Act to issue a report each year that projects new budget authority, outlays, and revenues for the next five years. This report fulfills that statutory requirement for fiscal years 1985 to 1989.

The baseline budget projections were prepared by the staff of the Budget Analysis and Tax Analysis Divisions, under the supervision of James L. Blum and Rosemary D. Marcuss. Paul N. Van de Water and Rosemary D. Marcuss were the principal authors. Important contributions were made by Valerie Amerkhail, David Bashore, Patricia Kinslow, Carl Moor, Kathleen O'Connell, Stephen Porter, Linda Radey, Charles J. Richardson, Kathy A. Ruffing, and Hyman Sanders. Robert L. Faherty supervised the editing and production of the report, assisted by Nancy H. Brooks. Francis S. Pierce edited major portions of the manuscript. Drafts of the report were typed by Linda Brockman and Sherri McLain. Andrew Hemstreet of Art Services, Inc. prepared the graphic illustrations.

Rudolph G. Penner
Director

February 1984

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CHAPTER I. SUMMARY AND INTRODUCTION

The federal deficit will decline only slightly this year, despite continued improvement in the economy. The Congressional Budget Office (CBO) estimates that the fiscal year 1984 deficit will be $190 billion--just below the record 1983 level of $195 billion. While revenues will grow by $62 billion, two-thirds of this increase will be absorbed by higher defense spending and debt service costs. Measured relative to the gross national product (GNP), the deficit will drop from 6.1 percent in 1983 to 5.3 percent in 1984.

Even this slight reduction in the deficit, however, may be short-lived. If current taxing and spending policies are continued unchanged, the deficit will grow in 1985 and in every year thereafter. In the absence of tax increases or spending reductions, the unified budget deficit will approach or exceed $300 billion by fiscal year 1989.

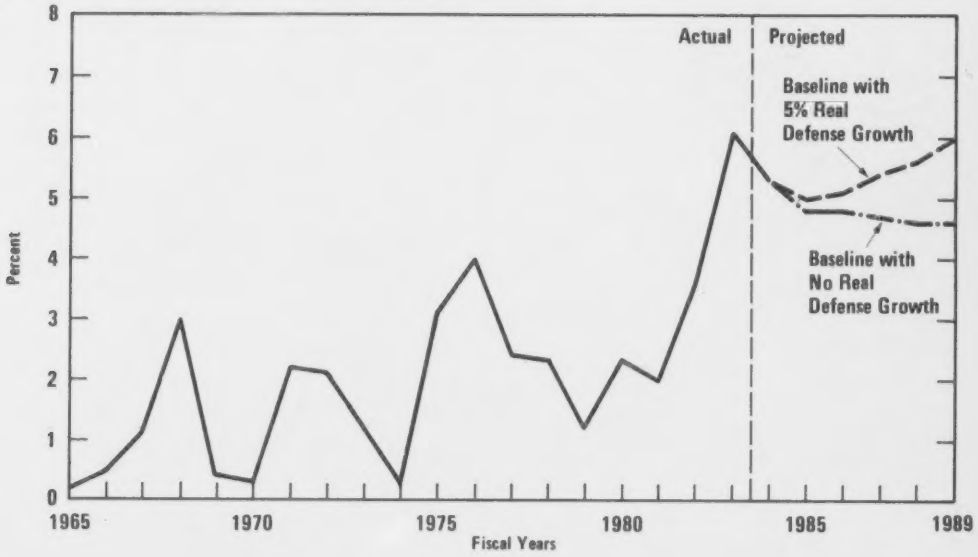
The baseline deficit path depends, among other things, upon the choice of a defense baseline (see Figure 1). If defense appropriations are increased by 5 percent per year in constant dollars, as was assumed in the fiscal year 1984 budget resolution adopted by the Congress, the deficit would climb to 6.1 percent of GNP, or $326 billion, by 1989. With no real growth in defense spending, the deficit would grow somewhat less rapidly than GNP, reaching $249 billion in five years.

These budget projections assume that taxing and spending policies for fiscal year 1984, as in effect at the end of the first session of the 98th Congress, continue unchanged for fiscal years 1985-1989. They are not forecasts of future federal budgets, since those budgets will doubtless include numerous policy changes. They are, however, a baseline or benchmark against which proposed policy changes may be measured.

In recent years the CBO baseline, sometimes with modified economic and other assumptions, has been used by both the House and Senate Budget Committees as the starting point for developing the Congressional budget resolutions. CBO budget projections have also served as the baseline for computing the spending reductions and revenue increases to be achieved in the budget reconciliation process. Finally, CBO uses baseline budget projections in its bill cost estimates for calculating the costs or savings that would result from legislative proposals to change existing law.

Figure 1.

Federal Deficit as a Percentage of GNP



This chapter explains the baseline concept and summarizes the baseline projections for the major budget aggregates--deficits, total revenues and outlays, off-budget spending, federal debt, and credit. It also presents the economic assumptions on which the current projections are based.

BASELINE BUDGET PROJECTIONS

Baseline budget projections are designed to show what would happen to the federal budget if current policies were continued into the future. This is not equivalent to assuming that there will be no new Congressional action. Without new legislation, spending programs requiring annual appropriation would quickly wither away because of the lack of funds; many other programs would disappear in later years as their authorizing legislation expired. The baseline projections assume that the Congress will take action as needed to continue the policies embodied in current legislation, including the maintenance of real resource levels for discretionary programs in the face of inflation. Table 1 and the following paragraphs summarize CBO's baseline budget projections for fiscal years 1985-1989. Chapter II provides further details, including revenues by source and outlays by spending category.

TABLE 1. BASELINE BUDGET PROJECTIONS (By fiscal year)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
In Billions of Dollars							
Baseline with 5% Real Growth in Defense Budget Authority a/							
Revenues	601	663	733	795	863	945	1,016
Outlays	796	853	928	1,012	1,112	1,227	1,342
Deficit	195	190	195	217	248	282	326
Budget Authority	867	923	1,019	1,116	1,231	1,374	1,504
Baseline with No Real Growth in Defense Budget Authority							
Revenues	601	663	733	795	863	945	1,016
Outlays	796	853	923	998	1,083	1,177	1,265
Deficit	195	190	190	203	220	232	249
Budget Authority	867	923	1,005	1,090	1,183	1,299	1,395
As a Percent of GNP							
Baseline with 5% Real Growth in Defense Budget Authority a/							
Revenues	18.6	18.6	18.7	18.7	18.7	19.0	18.9
Outlays	24.7	23.9	23.7	23.8	24.1	24.6	24.9
Deficit	6.1	5.3	5.0	5.1	5.4	5.6	6.1
Baseline with No Real Growth in Defense Budget Authority							
Revenues	18.6	18.6	18.7	18.7	18.7	19.0	18.9
Outlays	24.7	23.9	23.6	23.5	23.5	23.6	23.5
Deficit	6.1	5.3	4.9	4.8	4.8	4.7	4.6
Reference: Gross National Product (in billions of dollars)	3,229	3,563	3,910	4,251	4,612	4,987	5,379

a. Defense budget authority for 1985 and 1986 is assumed to be the amounts specified in the most recent Congressional budget resolution; defense budget authority for 1987-1989 is an estimate of the amounts required to achieve real increases of 5 percent per year.

Revenues

The baseline revenue figures in this report are a projection of federal receipts under tax laws in effect at the end of calendar year 1983. Tax legislation set to expire during the 1984-1989 period (listed in Appendix A) is assumed to expire as scheduled, with two exceptions. Airport and airway taxes are assumed to be continued beyond their 1987 expiration date, and highway trust fund taxes are assumed to be extended beyond 1988, as they have been continued in the past.

CBO projects that 1984 revenues will total $663 billion, an increase of $62 billion or 10.4 percent from the 1983 level. Over the following five years, baseline revenues will grow by an average of 8.9 percent per year, reaching $1,016 billion by 1989. Revenues will grow slightly more rapidly than the rate of growth in gross national product, claiming about 18.6 percent of GNP in 1984 and 18.9 percent in 1989.

Outlays

Federal spending can be divided essentially into two categories. The first category of spending is mandated by existing law. This includes spending for Social Security benefits and other entitlement programs, for permanent appropriations such as interest on the public debt, and for most trust funds and other special funds. The baseline spending projections for these programs are comparable to the baseline revenue projections. It is assumed that existing law at the close of the first session of the 98th Congress will continue unchanged, and that future spending will respond to assumed economic and population changes in the same way that it has responded to such changes in the past. Where programs are jointly administered by the federal and state governments (for example, unemployment compensation, aid to families with dependent children, and Medicaid), the baseline projections assume that the states will set eligibility rules and benefit levels in the future in generally the same manner as they have in the past.

The rest of federal spending is subject to annual review through the appropriations process. The baseline projections for nondefense appropriations are generally based on fiscal year 1984 funding levels as enacted by the Congress through December 1983, with future increases to keep pace with inflation. The projections for defense spending are calculated on a different basis than nondefense programs. The baseline projections for defense appropriations are based on 1984 funding levels as enacted by the Congress through December 1983, with future increases to accommodate pay and to keep pace with inflation and increases to bring real growth in

defense spending to the level assumed in the budget resolution adopted in June 1983. (Detailed baseline spending assumptions are provided in Appendix A.)

The baseline projections for defense spending assume real growth for a number of reasons. In 1978, the United States and its allies agreed to push up military spending by 3 percent per year after inflation. Both the Administration and the Congress have approved higher defense spending. From 1980 to 1984, defense budget authority--the legal authority to make spending commitments--has increased at a rate of over 8 percent per year in real terms. The First Concurrent Resolution on the Budget for Fiscal Year 1984 provides for real increases of 5 percent per year in defense budget authority for fiscal years 1984 and 1985. Actual defense appropriations for 1984 during the last session of the Congress represented a real increase of about 3 percent over the 1983 level.

While the baseline projections assume 5 percent real growth in defense spending as an approximation of current policy, the report also includes defense projections estimated on the same basis as is used for nondefense programs. These projections for defense spending are based on the fiscal year 1984 funding level as enacted through December 1983, with increases in 1986-1989 to keep pace with projected inflation in the defense sector. These defense projections will allow for a comparison of all federal discretionary spending, using the same baseline growth assumptions.

If real defense spending increases by 5 percent annually, as the budget resolution assumed, total baseline outlays would grow at about the same rate as GNP in 1985 and 1986 and would claim an increasing share of GNP in 1987, 1988, and 1989. By 1989, federal outlays would equal $1,342 billion and would represent 24.9 percent of GNP--slightly above the post-World War II record set in 1983.

If new defense spending authority were calculated on the same basis as generally assumed for nondefense programs, the ratio of outlays to GNP would decline slightly in 1985 and would remain relatively stable thereafter. By 1989, outlays would total $1,265 billion and would represent 23.5 percent of GNP.

Unified Budget Deficit

Because baseline revenues grow only slightly faster than GNP, the baseline deficit path parallels what happens to outlays. Assuming 5 percent annual real defense growth, the unified budget deficit would grow less rapid-

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ly than GNP in 1985 but would grow more rapidly in the 1986-1989 period. The baseline deficit would increase from $195 billion in 1985 to $326 billion in 1989--a rise from 5.0 percent to 6.1 percent of GNP.

Assuming no growth in real defense funding, the deficit would still grow in dollar terms after 1984, reaching $249 billion by 1989. The deficit would grow less rapidly than GNP, however, declining to 4.6 percent of GNP in 1989.

PERSPECTIVES ON THE DEFICIT

These deficit projections are obviously alarming, but their seriousness can be seen even more clearly by looking at some other budgetary measures shown in Table 2. The projections in Table 2 and, unless otherwise indicated, those in the rest of the report assume baseline revenues and spending, with 5 percent annual real growth in defense budget authority. The forces affecting the federal budget--past and future--are considered in depth in Chapter III.

Total Federal Deficit

The spending of certain federal entities has, by law, been excluded from the unified budget totals. The outlays of these off-budget entities, however, must be added to the unified budget deficit to determine the total federal deficit that must be financed. Table 2 therefore shows the CBO baseline projection of the outlays of off-budget federal entities and of the total deficit.

Under baseline assumptions, the outlays of the off-budget federal entities are projected to be $13 billion in 1984 and to remain at roughly that level for each of the next five years. Off-budget outlays will decline slowly from 0.4 percent of GNP in 1984 to 0.2 percent of GNP by 1989. When off-budget outlays are taken into account, the total federal deficit is projected to equal 5.7 percent of GNP in 1984, to drop to 5.3 percent of GNP in 1985, and to rise again in later years, reaching 6.3 percent of GNP by 1989.

Standardized-Employment Deficit

While the deficit will decline in 1984, the drop is less than would normally be expected during an economic recovery. Even worse, the projected deficit grows in later years, despite continuing improvement in

TABLE 2. ALTERNATIVE BUDGETARY MEASURES (By fiscal year)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
	In Billions of Dollars						
Unified Budget Deficit	195	190	195	217	248	282	326
Off-Budget Deficit	12	13	13	13	14	13	13
Total Deficit a/	208	203	208	230	262	295	339
Standardized-Employment Deficit b/	85	114	136	167	206	247	299
Primary Deficit c/	134	110	96	100	111	118	139
Debt Held by the Public, End of Year	1,142	1,327	1,534	1,763	2,024	2,318	2,656
	As a Percent of GNP						
Unified Budget Deficit	6.1	5.3	5.0	5.1	5.4	5.6	6.1
Off-Budget Deficit	0.4	0.4	0.3	0.3	0.3	0.3	0.2
Total Deficit a/	6.4	5.7	5.3	5.4	5.7	5.9	6.3
Standardized-Employment Deficit (as a percent of standardized GNP) b/	2.4	3.0	3.3	3.8	4.3	4.9	5.5
Primary Deficit c/	4.1	3.1	2.5	2.4	2.4	2.4	2.6
Debt Held by the Public, End of Year	35.4	37.2	39.2	41.5	43.9	46.5	49.4

a. Unified and off-budget deficits.

b. Unified budget deficit standardized at 6 percent unemployment.

c. Total unified and off-budget deficits less net interest and Federal Reserve profits.

the economy. Each year a smaller and smaller portion of the deficit can be blamed on economic slack; more and more will be due to ingrained taxing and spending policies.

One way to disentangle the effects of budgetary policies and economic conditions on the deficit is to estimate what the deficit would be if unemployment remained at a fixed rate. The resulting standardized-employment deficit removes the effects of differing levels of economic activity and isolates the effects of policy actions. It shows that current fiscal policies cause the deficit to grow every year. In CBO's baseline projections, the standardized-employment deficit rises from 3.0 percent of standardized GNP (at 6 percent unemployment) in 1984 to 5.5 percent by 1989. 1/

Primary Deficit

The large deficits substantially increase federal interest costs, in turn increasing the structural deficit. This can be seen by looking at the primary deficit--the total deficit excluding interest payments to the public and Treasury receipts from the Federal Reserve. As depicted in Figure 2, the primary deficit in 1989 will actually be lower in relation to GNP than is projected for 1984. Interest costs grow even more rapidly than the total deficit.

In analyzing the long-term effects of federal government deficits on private capital formation, some economists argue that the issue is not whether the deficit is increasing or decreasing, but whether federal debt relative to GNP is rising or falling. Over long periods of time, total debt--both private and government--is a fairly constant proportion of GNP. If this constancy is maintained, and if government-issued debt takes a larger share of GNP, then privately issued debt as a share of GNP must fall. To avoid an increase in the ratio of federal government debt to GNP, balancing the budget is not necessary; eliminating the primary deficit is generally sufficient.

If the primary deficit were eliminated, the federal government would have to borrow only to pay its interest costs. As long as the average interest rate on the government's debt was less than the growth rate of GNP, the debt-GNP ratio would fall, and more room would be made available for

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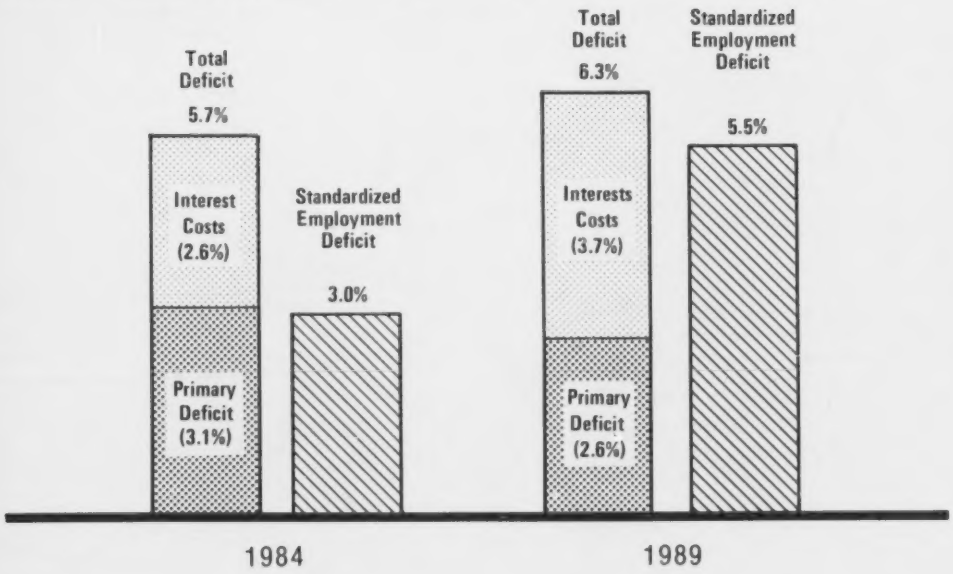
1. The standardized-employment deficit and the primary deficit are discussed in considerably more detail in Congressional Budget Office, The Economic Outlook (February 1984).

Figure 2.
Deficit Measures as a Percentage of GNP



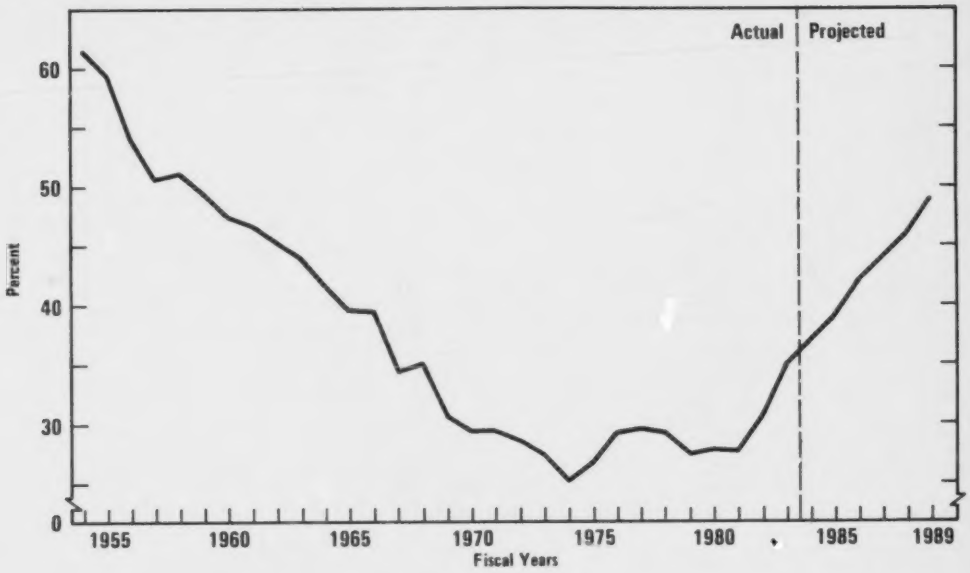
private borrowing. Balancing the primary deficit, however, is not necessarily ideal. It may be desirable to lower the debt-GNP ratio more rapidly than this criterion implies. At the very least, the debt-GNP ratio cannot be allowed to rise indefinitely.

Federal Debt

The large baseline deficits currently projected, however, would cause debt held by the public to increase by almost one and one-half times during the projections period. At the end of fiscal year 1983, debt held by the public equalled $1.1 trillion. By the end of 1989, that figure would swell to $2.7 trillion.

Such big increases in debt would reverse a long-run decline in the ratio of debt held by the public to gross national product. During the 1950s and 1960s, as illustrated in Figure 3, debt held by the public declined substantially in relation to GNP. The ratio then remained roughly level during the 1970s, before turning up in 1982 and 1983. Under baseline assumptions, the sharp increases of the past two years would continue. By 1989 the debt-GNP ratio would reach a level not seen since the mid-1950s.

Figure 3.
Federal Debt Held by the Public as a Percentage of GNP



Federal Loans and Loan Guarantees

The amount of federal borrowing and debt, however, do not fully measure the federal government's involvement in credit markets. The government also provides credit to individuals, businesses, and other borrowers both by making direct loans and by guaranteeing loans made by nonfederal lenders. Federal outlays do not reflect the total volume of new direct federal loans but only the amount of net lending--that is, new loans less repayments. Also, federal loan guarantees are not reflected at all in the budget unless borrowers default.

CBO projects that federal credit activity will continue its recent trend of growing less rapidly than the overall economy. Under baseline assumptions, the total of federal loan obligations and guarantee commitments will grow from $139 billion in 1983 and $147 billion in 1984 to $189 billion by 1989 (see Table 3). In five years, federal loans and guarantees will represent only 3.5 percent of GNP, compared to 4.9 percent of GNP five years ago and 4.1 percent in 1984.

TABLE 3. BASELINE CREDIT PROJECTIONS
(By fiscal year, in billions of dollars)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
Direct Loan Obligations	41	39	39	42	44	45	47
Primary Loan Guarantees	97	108	116	123	130	136	142
Total	139	147	155	165	173	181	189

ECONOMIC ASSUMPTIONS

Since economic conditions have major effects on federal budget revenues and outlays, budget projections must be based on explicit assumptions about economic trends over the next several years. Tax receipts depend on taxable incomes and sales, which reflect both real economic growth and inflation. About 30 percent of federal spending is directly indexed for inflation through automatic cost-of-living adjustments. Spending for Medicare and Medicaid rises with the cost of medical services. The baseline assumes that appropriations keep pace with inflation. The costs of certain benefit programs, such as unemployment insurance and food stamps, also depend on the level of unemployment in the economy. And the costs of interest on the public debt depend on the level of interest rates.

The major economic assumptions underlying the baseline budget projections are shown in Table 4 and displayed in Figure 4. These assumptions are explained in detail in Part I of CBO's annual report to the Budget Committees; they are only summarized here. CBO forecasts continued economic recovery for the next two years, with real growth rates of 5.4 percent in calendar year 1984 and 4.1 percent in 1985. The unemployment rate is projected to decline from an average of 9.6 percent in 1983 to 7.8 percent in 1984 and 7.3 percent in 1985. Inflation is expected to average about 5 percent, and the 91-day Treasury bill rate just under 9 percent.

While all short-run economic forecasts are subject to considerable uncertainty, the range of uncertainty is even greater for economic assumptions more than two years into the future. The economic assumptions for 1986 and beyond are therefore not a forecast but a projection that assumes noncyclical moderate economic growth and declin-

TABLE 4. BASELINE ECONOMIC ASSUMPTIONS
(By calendar year, dollar amounts in billions)

	1983 Actual	Forecast 1984	Forecast 1985	Longer-Run Assumptions 1986	Longer-Run Assumptions 1987	Longer-Run Assumptions 1988	Longer-Run Assumptions 1989
Gross National Product (GNP)							
Current dollars							
Amount	3,310	3,651	3,995	4,339	4,704	5,084	5,481
Percent change, year to year	7.7	10.3	9.4	8.6	8.4	8.1	7.8
Constant (1972) dollars							
Amount	1,535	1,617	1,683	1,742	1,803	1,865	1,928
Percent change, year to year	3.3	5.4	4.1	3.5	3.5	3.4	3.3
Prices							
GNP deflator (percent change, year to year)	4.2	4.7	5.1	4.9	4.7	4.5	4.3
Consumer Price Index (percent change, year to year)	3.2	4.8	5.1	4.9	4.7	4.5	4.3
Civilian Unemployment Rate (percent, annual average)	9.6	7.8	7.3	7.0	6.8	6.6	6.5
Interest Rates							
91-day Treasury bills (percent, annual average)	8.6	8.9	8.6	8.4	8.2	8.0	7.8
Treasury bonds (percent), annual average)	11.3	11.7	11.2	11.0	10.9	10.8	10.6

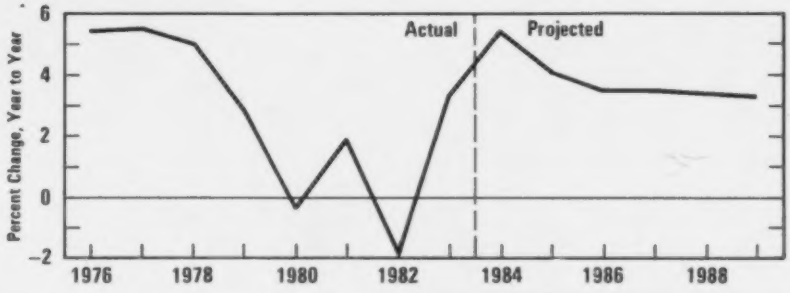
ing inflation. These long-run assumptions, however, are based on historical trends and are therefore not necessarily consistent with current budgetary or monetary policies. Indeed, many analysts contend that they are inconsistent. The sensitivity of the baseline budget projections to the underlying economic assumptions is analyzed in Chapter IV.

In the CBO long-run assumptions, real growth averaging 3.5 percent annually from 1985 to 1989 is projected to bring the unemployment rate down to 6.5 percent by calendar year 1989. In the absence of price shocks, inflation is assumed to decline to 4.3 percent per year by 1989. Because of the large baseline deficits, however, inflation-adjusted interest rates are held level after 1985.

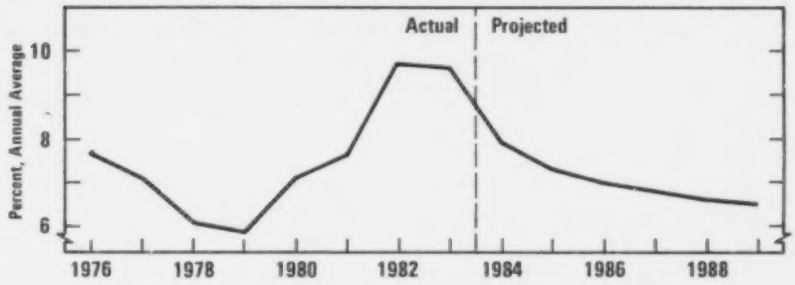
Figure 4.

Major Economic Assumptions

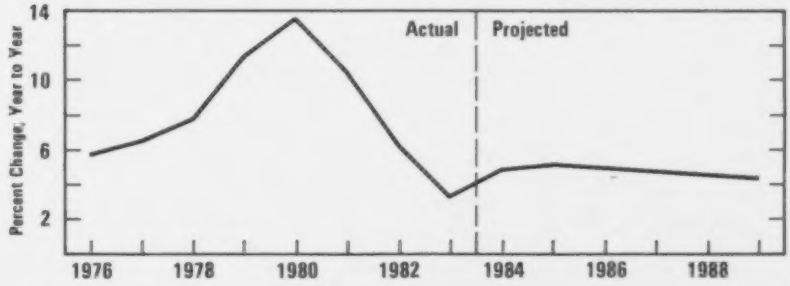
Real Economic Growth



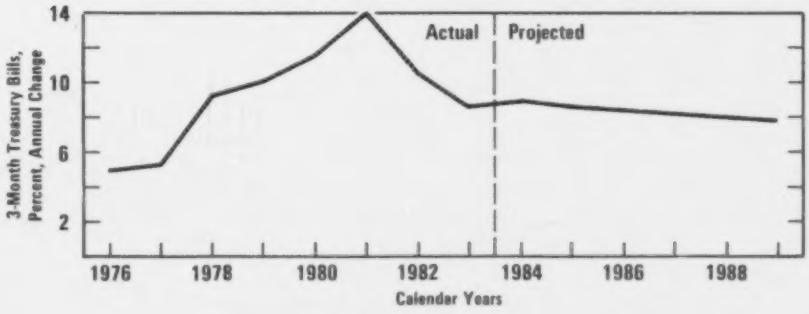
Civilian Unemployment Rate



Consumer Price Inflation



Short-Term Interest Rate



CHAPTER II. BASELINE REVENUE, OUTLAY, AND CREDIT PROJECTIONS

CBO estimates that current-law revenues will reach $663 billion in 1984, $62 billion higher than in 1983. This rebound in revenue growth after a drop in revenues in 1983 reflects with some delay the economic recovery underway since November 1982. Baseline revenues reach $733 billion in 1985 after a second year of 10 to 11 percent growth. By 1989, revenues will be $1,016 billion under current-law assumptions. They will be 18.9 percent of GNP, up from 18.6 percent in 1984.

Baseline outlays in 1984 will total $853 billion, an increase of $57 billion, or 7 percent, over last year's level. Under the baseline assumption that real defense spending grows by 5 percent per year, total outlays will reach $1,342 billion by 1989, growing by 9 percent a year in 1984-1989. In relation to GNP, on-budget spending will fall from 24.7 percent in 1983 to 23.7 percent in 1985 but will rise again thereafter. By 1989, the ratio of spending to GNP will slightly exceed its 1983 level.

Federal credit activity will grow from a 1984 base of $147 billion in direct loan obligations and guarantee commitments to $189 billion in 1989, if current policies remain in place. As a percentage of GNP, however, federal credit will decline, continuing the trend of the past several years.

The rest of this chapter describes the components of the baseline revenue, outlay, and credit projections. The reasons for the growth in revenues and spending are analyzed in Chapter III.

REVENUES

Baseline revenues are generated under existing tax law, with two exceptions. Airport and airway trust fund taxes are assumed to be extended at current rates beyond 1987, and highway trust fund taxes beyond 1988. These extensions contribute $14 billion to baseline revenues in 1989. All other provisions of existing tax law that are scheduled to expire during the 1984-1989 period are assumed to expire on schedule. Likewise, provisions that expired at the end of 1983 are assumed to have expired on schedule, even if the Congress is likely to reconsider them this session. Appendix A provides a compilation of tax provisions whose expirations during the projections period affect baseline revenues. An overview of revenue growth and the

changing composition of baseline revenues follows. A discussion of trends in revenues as shares of GNP, and of trends in tax rates and tax bases, is provided in Chapter III.

As mentioned above, baseline revenues grow slightly faster than GNP--on average, more than 9 percent per year--over the 1984-1989 period. Under baseline assumptions, personal taxes--income taxes and social insurance taxes and contributions--rise faster than other taxes, increasing in importance as revenue sources. Corporate income taxes, excise taxes other than windfall profit taxes, customs duties, and miscellaneous receipts rise, but continue to diminish in relative importance as revenue sources. Windfall profit taxes and estate and gift taxes actually decrease over the period (see Table 5 and Figure 5).

Individual income taxes, which account for close to half of all revenues, grow at more than 10 percent per year on average over the 1985-1989 period after modest growth in 1984. The last 4 percent of the 23 percent across-the-board reduction in income tax liabilities, relative to 1980, enacted in the Economic Recovery Tax Act of 1981 (ERTA) becomes effective in 1984, depressing revenue growth relative to the growth in income. By 1989, baseline individual income taxes will be more than 60 percent ($184 billion) above the 1984 level. As established by ERTA, the tax brackets, the zero bracket amount, and personal exemptions will be indexed (with a lag) to the Consumer Price Index for all urban consumers beginning in 1985. Income taxes grow faster than incomes during 1985-1989 under baseline assumptions because real income increases, which are significant, continue to move taxpayers into higher tax brackets.

Social insurance taxes and contributions also grow by more than 60 percent over the 1984-1989 period, likewise increasing their share of GNP and total revenues. Social Security taxes (Old-Age, Survivors, Disability, and Health Insurance taxes, or OASDHI), which make up almost 90 percent of total social insurance revenues, increase 67 percent, bolstered by the payroll tax increases enacted in the Social Security Amendments of 1983 (P.L. 98-21). The baseline treatment of the Social Security trust fund revenue increases enacted in the 1983 amendments is explained in Chapter III.

Unemployment Insurance (UI) taxes, the other major component of social insurance revenues, grow more slowly. This occurs for two distinct reasons. State UI tax rates are based on the past employment experience of each employer. As the general unemployment rate falls, employers' tax rates tend to decrease, with a lag. UI tax receipts actually decrease in 1988 because the Federal Unemployment Tax Account tax rate decreases when the loans made by the Extended Unemployment Compensation Account during the 1980-1982 recession periods are finally paid off. UI revenues increase

TABLE 5. BASELINE REVENUE PROJECTIONS BY SOURCE
(By fiscal year)

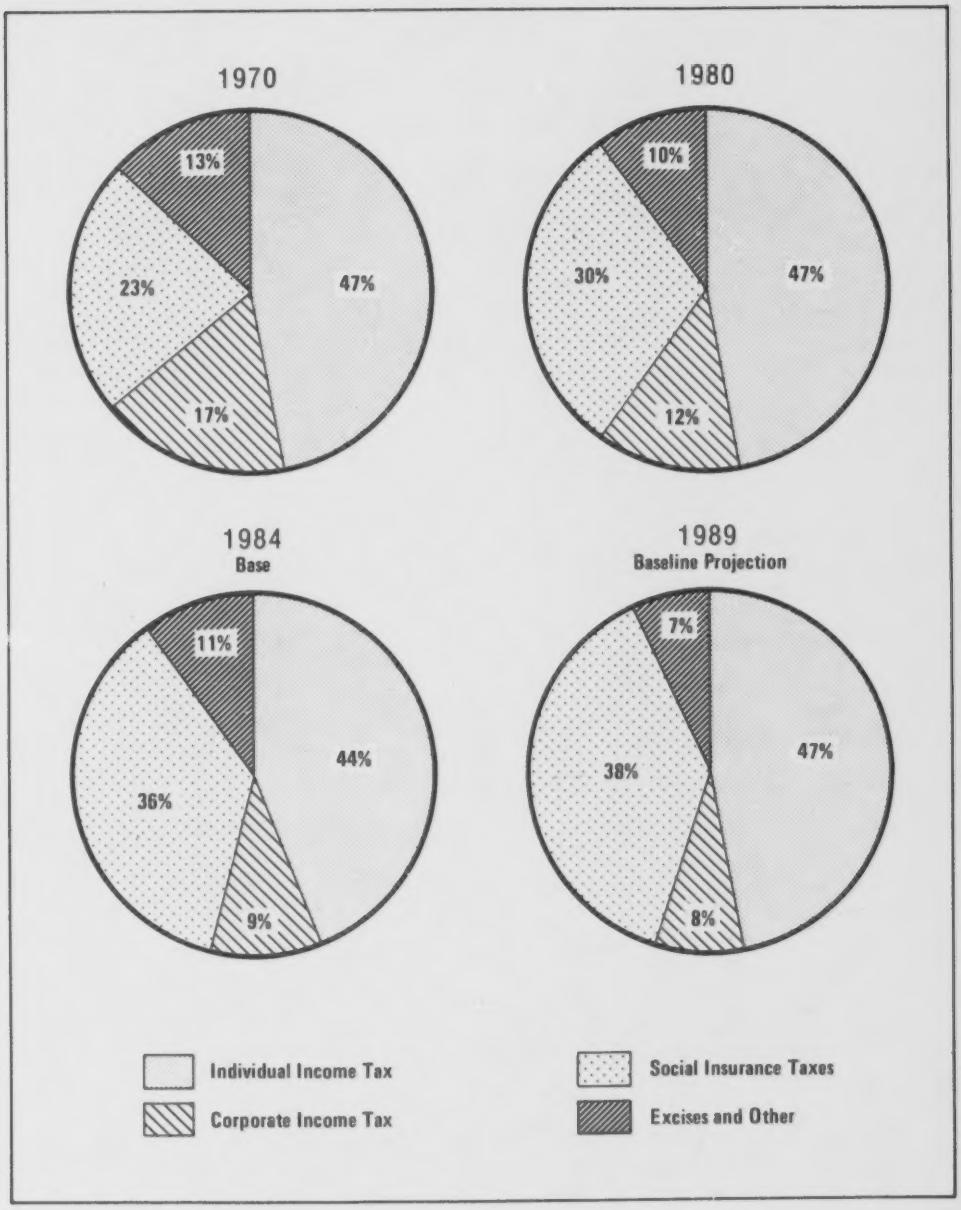
	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
	In Billions of Dollars						
Individual Income Taxes	289	294	329	362	396	438	478
Corporate Income Taxes	37	62	65	71	81	85	85
Social Insurance Taxes	209	237	269	296	320	354	382
Excise Taxes							
Windfall profit taxes	13	9	7	5	4	4	4
Other	22	29	31	27	28	28	29
Estate and Gift Taxes	6	6	6	5	5	4	5
Customs Duties	9	10	11	12	12	12	13
Miscellaneous Receipts	16	16	16	17	18	19	20
Total Baseline Revenues	601	663	733	795	863	945	1,016
	As a Percent of GNP						
Individual Income Taxes	9.0	8.2	8.4	8.5	8.6	8.8	8.9
Corporate Income Taxes	1.2	1.8	1.7	1.7	1.8	1.7	1.6
Social Insurance Taxes	6.5	6.7	6.9	7.0	6.9	7.1	7.1
Excise Taxes							
Windfall profit taxes	0.4	0.2	0.2	0.1	0.1	0.1	0.1
Other	0.7	0.8	0.8	0.6	0.6	0.6	0.6
Estate and Gift Taxes	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Customs Duties	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Miscellaneous Receipts	0.5	0.5	0.4	0.4	0.4	0.4	0.4
Total Baseline Revenues	18.6	18.6	18.7	18.7	18.7	19.0	18.9

again in 1989, reflecting the continued growth in wages and salaries. By 1989, total social insurance taxes under baseline assumptions reach $382 billion, $145 billion above the 1984 level, rising from 36 percent to 38 percent of revenues.

Corporate income taxes increase dramatically in 1984 from the recession-caused low level of 1983. In the 1985-1989 period, corporate taxes grow at about 7 percent per year, continuing a long-established trend of

Figure 5.

The Composition of Federal Revenues



diminishing in relative importance as a revenue source. This decline results primarily from accelerated depreciation and the moderation of inflation, relative to recent experience, assumed in the baseline.

Excise taxes decline from $38 billion in 1984 to $33 billion in 1989. The reduction is accounted for by the drop in windfall profit tax revenues from $9 billion in 1984 to $4 billion in 1989. Other excise taxes, for the most part highway and airport and airway trust fund taxes and cigarette and alcohol taxes, remain roughly flat over the period at about $29 billion. Temporary cigarette and telephone tax increases, enacted as part of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), are phased out in 1985; other revenues in this category tend to rise with economic growth.

Other taxes--estate and gift taxes, customs duties, and miscellaneous receipts consisting mostly of Federal Reserve payments--increase by $5 billion over the projections period, reaching $37 billion in 1989. Like excise taxes, they decrease in relative importance as tax sources. When combined, excises and other taxes shrink from 11 to 7 percent of total baseline revenues between 1984 and 1989.

OUTLAYS

Baseline outlays grow by 55 percent, or about 9 percent per year, during the projections period. Because different types of spending grow at much different rates, however, the composition of federal spending changes substantially over the next few years. Under baseline assumptions, the share of gross federal spending (excluding offsetting receipts) devoted to national defense and interest rises, while the relative importance of entitlements and nondefense discretionary spending falls (see Table 6 and Figure 6).

The most rapidly growing category of spending in the baseline is net interest. With large and growing baseline deficits and no reduction in inflation-adjusted interest rates after 1985, federal borrowing costs are projected to double over the next five years. Net interest costs increase from $108 billion in 1984 to $219 billion by 1989, a rise of $111 billion. The portion of gross spending devoted to interest rises from 12 percent in 1984 to 16 percent by 1989.

Defense spending grows by 79 percent between 1984 and 1989, assuming real increases of 5 percent per year. This is an increase of $184 billion, from $235 billion in the base year to $419 billion at the end of the projections period. The share of defense spending in the budget is projected to grow from 26 percent to 30 percent.

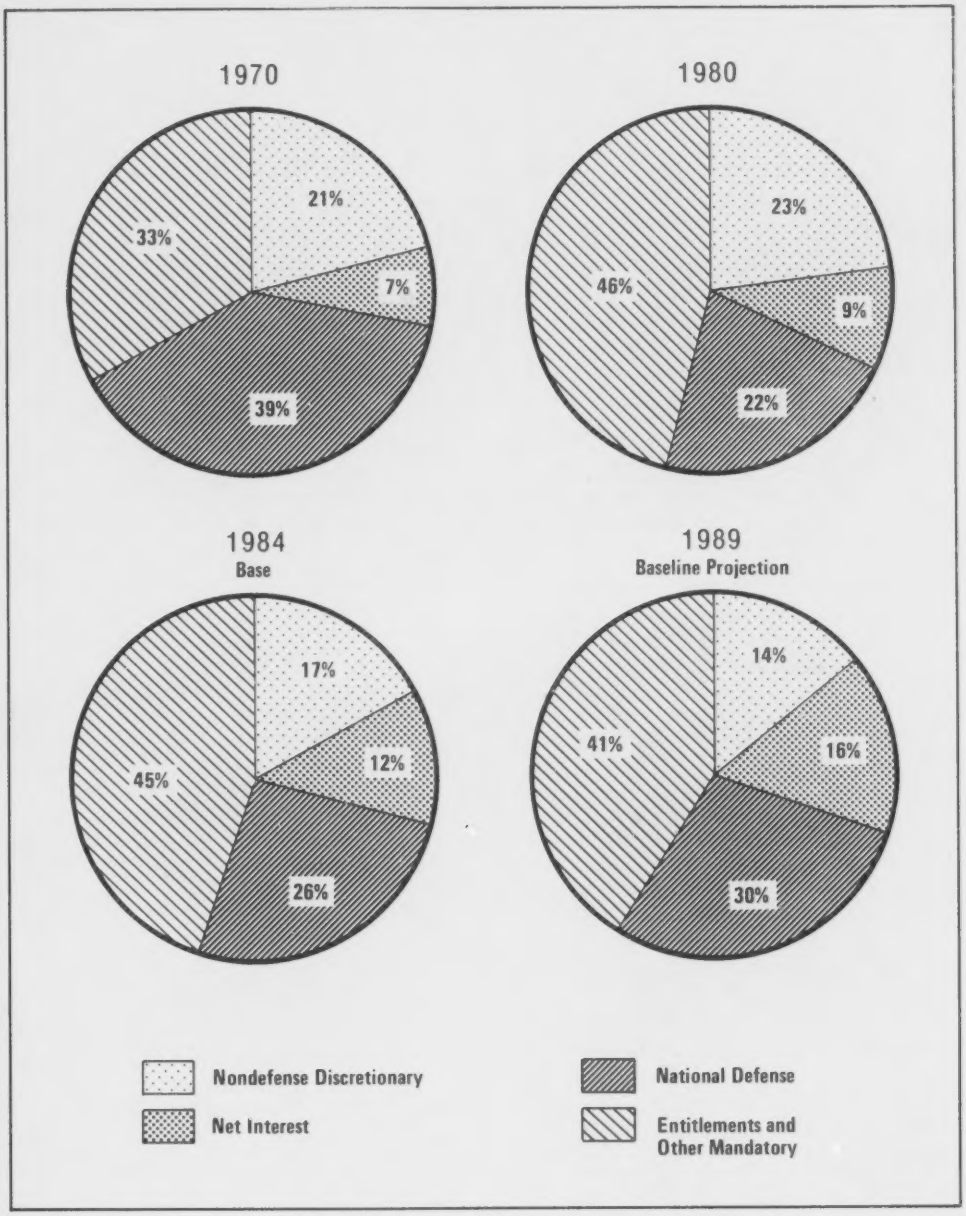
TABLE 6. BASELINE OUTLAY PROJECTIONS FOR MAJOR SPENDING CATEGORIES (By fiscal year)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
	In Billions of Dollars						
National Defense	210	235	263	295	331	372	419
Entitlements and Other Mandatory Spending	400	400	425	456	490	530	570
Nondefense Discretionary Spending	144	156	161	168	178	189	198
Net Interest	90	108	127	145	168	194	219
Offsetting Receipts	-48	-46	-49	-52	-55	-59	-64
Total Budget Outlays	796	853	928	1,012	1,112	1,227	1,342
Off-Budget Federal Entities	12	13	13	13	14	13	13
Total Outlays	808	866	941	1,025	1,125	1,240	1,355
	As a Percent of GNP						
National Defense	6.5	6.6	6.7	6.9	7.2	7.5	7.8
Entitlements and Other Mandatory Spending	12.4	11.2	10.9	10.7	10.6	10.6	10.6
Nondefense Discretionary Spending	4.4	4.4	4.1	4.0	3.9	3.8	3.7
Net Interest	2.8	3.0	3.2	3.4	3.6	3.9	4.1
Offsetting Receipts	-1.5	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2
Total Budget Outlays	24.7	23.9	23.7	23.8	24.1	24.6	24.9
Off-Budget Federal Entities	0.4	0.4	0.3	0.3	0.3	0.3	0.2
Total Outlays	25.0	24.3	24.1	24.1	24.4	24.9	25.2

Domestic spending--the combination of entitlements and discretionary programs--grows by 38 percent, or 7 percent per year, over the projections period. Because this is well below the rate of increase in total outlays, the share of the budget devoted to these programs is projected to decline from 62 percent in 1984 to 55 percent in 1989. The dollar increase is still sub-

Figure 6.

The Composition of Gross Federal Spending



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stantial, however--from $556 billion in 1984 to $769 billion in 1989, a rise of $213 billion.

National Defense Programs

National defense programs include not only the military activities of the Department of Defense but also the nuclear weapons programs of the Department of Energy and miscellaneous defense activities, such as defense stockpiles and selective service. After 1984, as provided by the Department of Defense Authorization Act for 1984 (P.L. 98-94), the defense spending totals no longer include actual cash outlays for military retirement benefits but incorporate instead payments to the new military retirement trust fund for the additional accrued retirement costs for military personnel currently on active duty. (In this report, CBO has adjusted the data for 1984 and earlier years to make them comparable.)

The CBO defense baseline is an extrapolation of the fiscal year 1984 Congressional budget resolution, and shows annual real increases of about 5 percent in defense budget authority. For 1985 and 1986, baseline budget authority is the actual dollar amounts specified in the budget resolution. For 1987-1989, it is CBO's estimates of the amounts required to achieve real increases of 5 percent per year under baseline economic assumptions. The resulting baseline outlays are $263 billion in 1984 and $419 billion in 1989.

As discussed in Chapter I, other defense baseline assumptions are possible. If new defense spending authority were calculated on the same basis generally assumed in the baseline for nondefense programs, defense budget authority would be increased just enough to keep pace with inflation; there would be no real growth. Under this concept, outlays are $259 billion in 1985 and $354 billion in 1989, $65 billion below the 5 percent real growth path. These two paths are compared in Table 7. Further details on the defense baseline and an alternative programmatic defense projection are provided in Appendix A.

Entitlements and Other Mandatory Spending

An entitlement program is one that provides benefits to any person, business, or unit of government that meets the eligibility requirements established in laws and regulations. Authorization for entitlements constitutes a binding obligation on the part of the federal government, and eligible recipients have legal recourse if the obligation is not met. In addition, other permanent appropriations and certain annually appropriated accounts are treated as mandatory even though the House and Senate Budget Committees

TABLE 7. ALTERNATIVE DEFENSE SPENDING PROJECTIONS
(By fiscal year, in billions of dollars)

	1984 Base	Projections				
		1985	1986	1987	1988	1989
Baseline (Approximately 5% Annual Real Growth)						
Budget Authority	264	297	329	371	419	474
Outlays	235	263	295	331	372	419
Adjust Budget Authority for Inflation Only (No Real Growth)						
Budget Authority	264	283	304	326	351	378
Outlays	235	259	282	305	329	354

do not consider them entitlements. The list of mandatory items used here has been employed in developing the Congressional budget resolutions for the past two years. Between 1984 and 1989, entitlements grow from $400 billion to $570 billion but shrink as a share of gross outlays--from 45 percent to 41 percent.

Table 8 divides entitlement and mandatory spending into four broad categories--social insurance programs, means-tested programs, federal employee retirement and disability, and other. About two-thirds of entitlement spending is for social insurance programs--Social Security, Medicare, unemployment compensation, and railroad retirement. These programs provide cash benefits or (in the case of Medicare) services to insured individuals and their dependents. Insured status is achieved by working for a sufficient period of time in covered employment, and cash benefits are based on prior earnings. Social insurance spending increases from $265 billion to $388 billion between 1984 and 1989, with almost half of the increase being in Medicare.

The means-tested category comprises programs that provide cash benefits or services to low-income people who meet the eligibility criteria. Means-tested programs represent $61 billion, or 15 percent of entitlement outlays in 1984. The largest and most rapidly growing program in the subcategory is Medicaid, with outlays of $21 billion in 1984 and $32 billion in 1989. Other means-tested programs--including Food Stamps, assistance

TABLE 8. BASELINE OUTLAY PROJECTIONS FOR ENTITLEMENTS AND OTHER MANDATORY SPENDING (By fiscal year, in billions of dollars)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
Social Insurance Programs							
Social Security	165	173	184	197	211	227	243
Medicare	56	64	74	83	94	106	120
Unemployment compensation	31	22	19	18	18	18	19
Railroad retirement	6	6	6	6	6	7	7
Subtotal	258	265	283	303	329	358	388
Means-Tested Programs							
Medicaid	19	21	23	25	27	30	32
Food Stamps	12	11	11	12	12	13	13
Assistance Payments	8	8	8	8	8	9	9
Supplemental Security Income	9	8	9	10	10	12	11
Veterans Pensions	4	4	4	4	4	4	4
Guaranteed Student Loans	3	3	3	3	3	3	3
Child Nutrition	3	3	4	4	4	4	4
Other	2	2	2	2	2	2	2
Subtotal	60	61	65	68	72	77	81
Federal Employee Retirement and Disability							
Civilian a/	21	22	24	26	28	29	31
Military	16	17	18	19	20	21	23
Subtotal	37	39	41	44	48	51	54
Other Programs							
Veterans benefits b/	13	13	13	13	13	14	14
Farm price supports	19	7	9	12	13	15	18
General revenue sharing	5	5	5	5	5	5	5
Social services	3	4	4	4	4	4	4
Other	6	6	6	6	6	7	7
Subtotal	46	35	36	40	42	45	48
Total	400	400	425	456	490	530	570

a. Includes Coast Guard retirement.
b. Includes veterans' compensation, readjustment benefits, life insurance, and housing programs.

payments, and Supplemental Security Income--sum to $40 billion in 1984 and $49 billion in 1989.

Federal employee retirement and disability benefits account for about 10 percent of entitlement spending, $39 billion in 1984 and $54 billion in 1989. These payments are similar to private-sector pension benefits and are based on the federal retiree's length of service and final salary.

The remaining entitlement or mandatory programs are of varied sorts. Some are grants to state and local governments for vocational rehabilitation and other social services. General revenue sharing provides general purpose fiscal assistance to local governments. The farm price support programs of the Commodity Credit Corporation are also included here.

Nondefense Discretionary Spending

This category covers all remaining discretionary programs subject to annual appropriations or to loan limits imposed in appropriations acts. The baseline projections generally assume that the 1984 appropriation or loan limit will be held constant in real terms. Nondefense discretionary programs accounted for 17 percent of total gross outlays in 1984. Since no real growth is assumed during the projections period, the share of total gross outlays accounted for by these programs falls to 14 percent by 1989.

Table 9 divides nondefense discretionary spending into seven subcategories. The largest subcategory, accounting for almost one-third of the total, consists of benefits and services to individuals. Some of these benefits are provided through grants to state or local governments--for example, aid to primary and secondary education, employment and training assistance, and low-income energy assistance. Others, such as veterans' medical care, are provided directly by the federal government.

Just over one-quarter of discretionary spending is devoted to the construction, operation, management, or maintenance of the nation's public infrastructure. Some of these programs involve grants to state and local governments for such things as pollution control, highways, mass transportation, and community development. Others are federally run --flood control and reclamation, national parks and forests, and air traffic control, for example.

About 15 percent of the category goes to finance the basic activities of government--the conduct of foreign affairs, the administration of justice, the legislative branch, the tax collection system, and the like. Other nondefense discretionary spending provides for aid to foreign governments

TABLE 9. BASELINE PROJECTIONS FOR NONDEFENSE DISCRETIONARY SPENDING (By fiscal year, in billions of dollars)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
Aid to Foreign Governments and International Organizations	9	10	11	11	12	12	13
Federal Government Operations	21	24	24	25	26	27	28
Infrastructure	40	47	46	48	49	51	53
Assistance to Business and Commerce	9	8	7	7	8	9	10
Research and Development	17	18	19	20	21	22	23
Benefits and Services to Individuals	48	50	52	55	58	60	63
Civilian Agency Pay Raises	--	1	1	3	5	7	9
Total	144	156	161	168	178	189	198

and international organizations, assistance to business and commerce, and various nondefense research and development programs. An allowance for pay raises for employees of federal civilian agencies is shown separately rather than being distributed among the other subcategories.

Net Interest

The net interest category for the most part represents interest costs for that portion of the federal debt held by the public, including the Federal Reserve System. It also includes interest payments on tax refunds and, as offsets, interest collections from federal agencies and the public. Interest paid to government trust funds has no effect, since it is counted both as an outlay and a receipt.

Net interest costs depend on the level of the total interest-bearing debt held by the public and on interest rates. Because of growing deficits

and continued high interest rates, net interest outlays are projected to grow very rapidly. Under baseline assumptions, net interest outlays more than double over the projections period, rising from $108 billion in 1984 to $219 billion by 1989. The sensitivity of these projections to interest rates and deficits is discussed in detail in Chapter IV.

Debt held by the public also more than doubles over the next five years, reaching $2.7 trillion by the end of 1989. As shown in Table 10, debt

TABLE 10. BUDGET FINANCING AND DEBT (By fiscal year)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
			In Billions of Dollars				
Budget Financing							
Unified budget deficit	195	190	194	216	248	281	325
Off-budget deficit	12	13	13	13	14	13	13
Total	208	203	207	229	261	294	338
Means of financing other than borrowing from the public	5	-18	-1	-1	-1	-1	-1
Borrowing from the public	212	185	206	228	260	293	337
Debt Outstanding, End of Year							
Debt held by the public	1,142	1,327	1,533	1,761	2,021	2,314	2,652
Held by government accounts	240	273	322	384	453	539	638
Total, gross federal debt	1,382	1,600	1,856	2,146	2,474	2,854	3,289
Debt subject to statutory limit	1,378	1,596	1,852	2,142	2,470	2,850	3,285
			As a Percent of GNP				
Debt held by the public	35.4	37.2	39.2	41.4	43.8	46.4	49.3

held by the public grows by roughly the amount of unified budget deficits and deficits of off-budget agencies that borrow from the Treasury. Debt subject to statutory limit includes debt held both by the public and by federal government trust funds and excludes a small amount of agency and other debt. Debt subject to limit will reach its current statutory ceiling of $1,490 billion sometime this spring.

Offsetting Receipts

This category includes federal government proprietary receipts from the public that are subtracted from outlays rather than being included in revenues. It also includes federal agencies' payments (as employer) for employee retirement and health benefits. It does not include receipts appropriately netted against outlays (for example, foreign military sales trust fund receipts and federal payments to trust funds).

The major types of offsetting receipts are identified in Table 11. Of the $49 billion in this category projected for 1985, $28 billion is the federal

TABLE 11. BASELINE PROJECTIONS OF OFFSETTING RECEIPTS
(By fiscal year, in billions of dollars)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
Mineral Sales and Leases	-4	-3	-2	-2	-2	-3	-3
Power Sales	*	*	*	*	*	-1	-1
Timber Sales	-1	-1	-1	-1	-1	-2	-2
Medicare Premiums	-4	-5	-6	-6	-7	-7	-8
Employer Share of Employee Retirement							
Civilian	-8	-9	-10	-11	-12	-13	-14
Military	-15	-17	-18	-19	-20	-22	-23
OCS Rents and Royalties	-10	-7	-7	-7	-7	-7	-9
Other	-5	-5	-4	-5	-5	-5	-5
Total	-48	-46	-49	-52	-55	-59	-64

* Less than $500 million.

employer share of employee retirement, including for the first time this year Defense Department payments to the new military retirement trust fund. (While the trust fund does not actually begin operation until 1985, this report adjusts the data for earlier years to make them comparable.) The next largest item, $7 billion, is rents and royalties for energy source development on Outer Continental Shelf (OCS) tracts. Another $6 billion consists of premiums paid by enrollees in Supplementary Medical Insurance (Medicare Part B) and by those who do not have sufficient quarters of coverage for Hospital Insurance (Medicare Part A). Other receipts are for the sale or lease of minerals, electric power, and timber.

Off-Budget Federal Entities

As explained in Chapter I, the spending of certain federal entities is exluded from the unified budget totals. The outlays of these off-budget entities, however, must be added to the unified budget deficit to derive the total federal deficit that must be financed.

As shown in Table 12, the Federal Financing Bank (FFB) accounts for most off-budget outlays. The FFB's outlays do not come from programs that the FFB operates itself. Instead, the FFB assists other programs within the government by purchasing the outstanding loans (loan assets) or by purchasing obligations they have guaranteed. When the FFB buys loan assets, it in effect converts direct loans that have already been made by another agency into off-budget direct loans of the FFB. If the selling agency is in the budget, its loan asset sales reduce its budget totals; the agency's lending

TABLE 12. BASELINE OUTLAY PROJECTIONS FOR OFF-BUDGET FEDERAL ENTITIES (By fiscal year, in billions of dollars)

	1983 Actual	1984 Base	Projections				
			1985	1986	1987	1988	1989
Federal Financing Bank	10	9	11	11	11	12	12
Strategic Petroleum Reserve	2	2	2	1	2	2	1
Other	*	1	*	*	1	*	*
Total	12	13	13	13	14	13	13

* Less than $500 million.

activities show up instead in the off-budget FFB. Also, when the FFB purchases newly originated guaranteed loans, it has the effect of converting loan guarantees that are not recorded in the budget totals into direct federal loans that appear only off-budget.

BASELINE CREDIT PROJECTIONS

CBO projects that federal credit activity will grow from a 1984 base of $147 billion in direct loan obligations and primary loan guarantee commitments to $189 billion in 1989 if current policies remain in place. Net direct loan obligations are expected to increase more slowly than primary guarantees. Table 13 shows that direct loans will remain at $39 billion in 1984 and 1985 and then slowly rise to $47 billion by 1989, an increase of 21 percent. Three-quarters of this direct lending and the same proportion of the growth will occur in on-budget credit--lending by federal agencies included in the unified budget. The remaining one-quarter of direct lending will occur off-budget, primarily through the Federal Financing Bank. Primary loan guarantee commitments in the baseline increase from $108 billion in 1984 to $142 billion in 1989, a rise of 31 percent.

The credit budget provides a better measure of federal lending activities than does the spending budget, even when off-budget spending is included. The spending budget is incomplete for two reasons: (1) the inclusion of only

TABLE 13. BASELINE CREDIT PROJECTIONS (By fiscal year, in billions of dollars)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
Net Direct Loan Obligations							
On-budget	32	29	29	31	33	34	35
FFB purchases of agency guaranteed loans	8	9	10	9	10	10	11
Other off-budget	1	1	1	1	1	1	2
Subtotal	41	39	39	42	44	45	47
Primary Loan Guarantees	97	108	116	123	130	136	142
Total	139	147	155	165	173	181	189
Secondary Guarantees	64	68	71	75	78	80	83

net borrowing--new loans less repayments--both on- and off-budget; and (2) the exclusion of federal loan guarantees. Because the budget operates on a cash flow basis, repayments of loans count as an offset to outlays. This understates the volume of new lending by the government. Loan guarantees do not show up at all as a transaction in the spending budget unless there is a loan default.

The projected growth rates of federal credit vary by type of loan. Table 14 divides the credit budget into six major categories--housing, business and industry, agriculture and rural development, loans to foreign countries,

TABLE 14. BASELINE PROJECTIONS OF NET DIRECT LOAN OBLIGATIONS AND PRIMARY LOAN GUARANTEE COMMITMENTS BY PURPOSE OF LOAN
(By fiscal year, in billions of dollars)

		1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
Housing Loans	DL	6	7	6	6	6	6	7
	PG	73	85	91	98	103	109	114
	Total	79	91	97	104	109	115	121
Loans for Business and Industry	DL	3	4	5	7	7	8	8
	PG	12	12	13	14	15	15	16
	Total	15	16	18	21	22	23	24
Loans for Agriculture and Rural Development	DL	23	20	19	19	19	20	20
	PG	5	3	4	4	4	4	4
	Total	28	23	22	23	23	24	25
Loans to Foreign Countries	DL	7	8	8	9	9	9	10
	PG	*	*	*	*	*	*	*
	Total	7	8	8	9	9	10	10
Loans for Individuals	DL	1	1	1	1	1	1	1
	PG	8	7	7	7	7	7	7
	Total	8	8	8	8	8	8	8
All Other	DL	1	1	1	1	1	1	1
	PG	*	*	*	*	*	*	*
	Total	1	1	1	1	1	1	1
Total	DL	41	39	39	42	44	45	47
	PG	97	108	116	123	130	136	142
	Total	139	147	155	165	173	181	189

* Less than $500 million.

DL Net direct loan obligations.
PG Primary loan guarantee commitments.

loans for individuals, and other. Two of those categories--housing loans and loans for business and industry--account for $38 billion out of the $42 billion increase in federal credit activity between 1984 and 1989.

Housing loans and guarantees rise from $91 billion in 1984 to $121 billion in 1989. The major increases, which take place in the home mortgage guarantee and insurance programs of the Federal Housing Administration and the Veterans Administration, are based on growing housing sales resulting from gradually declining interest rates. Guarantees for low-rent public housing, on the other hand, are projected to remain at the 1984 level through 1989.

Loans and guarantees for business and industry grow from $16 billion in 1984 to $24 billion in 1989. The bulk of this rise takes place in the direct loan and guarantee programs of the Export-Import Bank. Continued economic expansion and a slight decline in the exchange value of the dollar are projected to make U.S. exports more attractive and to increase the demand for Export-Import Bank assistance.

The remaining categories of federally assisted lending grow less rapidly. Farm prices cause agriculture loans to fluctuate, declining in 1985 and slowly increasing thereafter. Other loan programs increase at the rate of inflation, or remain at 1984 levels because of budgetary or eligibility limits.

CHAPTER III. THE DYNAMICS OF THE BUDGET

The deficits projected for the next few years are sharply higher than those of just a few years ago. CBO's baseline budget projections show deficits averaging 5.4 percent of gross national product from 1984 to 1989. In 1965-1981, they averaged 1.7 percent. As recently as 1981, the deficit amounted to just 2.0 percent of GNP.

These large deficits come about from combining the outlay levels of the 1980s with the revenue levels of the sixties and seventies. As Figure 7 shows, baseline federal government outlays in the 1984-1989 period will average 24.2 percent of GNP--1.3 percentage points higher than in 1981 and 3.5 percentage points above the 1965-1981 average. But federal government tax revenues will average about the same share of GNP during the 1984-1989 period as they did from 1965 to 1981--about 19 percent. This rate of taxation is about two percentage points below the record 1981 figure of 20.8 precent.

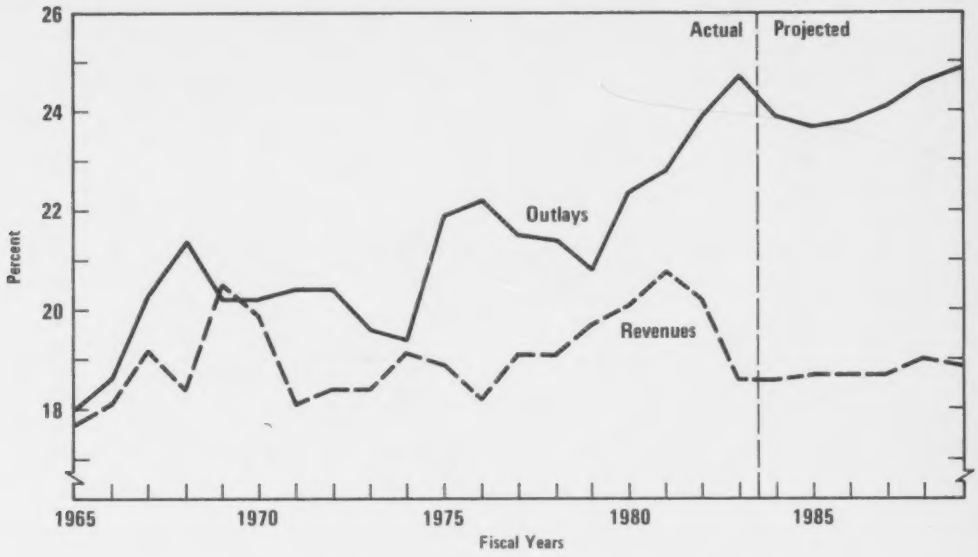
The interpretation of these trends in revenues and outlays depends on one's vantage point. Viewed from a 1981 perspective, outlays rise as increased spending on national defense and net interest is less than fully offset by cuts in entitlements and nondefense discretionary programs. Similarly, revenues decline relative to GNP, in part because of reductions in effective personal and corporate income tax rates.

Viewed from 1965 or 1970, however, the picture appears quite different. Total revenues as a share of GNP look relatively stable, but outlays grow considerably, paralleling the growth in entitlement programs, particularly Social Security and Medicare. While payroll taxes grow rapidly to pay for the growth in Social Security and Medicare, general revenues fall significantly relative to GNP. By 1989, defense spending as a percent of GNP is about the same as it was in 1965.

This chapter looks at the forces affecting the federal budget--past and future. Its first two sections examine the long-run trends in revenues and outlays, respectively, and detail the sources of revenue and outlay growth. The concluding section analyzes the changes that have occurred in the budget outlook in the past year. The effects on the budget of policy changes since 1981 are detailed in Appendix D.

Figure 7.

Federal Revenues and Outlays as Percentages of GNP



REVENUE TRENDS

CBO estimates that 1984 federal government revenues will equal $663 billion. By 1989, baseline revenues will reach $1,016 billion, over 50 percent above the 1984 level. Baseline revenues rise steadily over the 1984-1989 period, at an average growth rate slightly above that of nominal GNP. As a percentage of GNP, revenues increase from 18.6 percent in 1984 to 18.9 percent in 1989.

The major tax changes enacted in the last session of the Congress were the Social Security Amendments of 1983 (P.L. 98-21). Without these tax increases, baseline revenues would decline slightly as a percentage of GNP over the 1984-1989 period. A description of these changes follows. Next, trends in the baseline revenue share of GNP and personal and corporate income tax rates and bases are discussed.

Recent Tax Legislation: The Social Security Amendments

The budget resolution for fiscal year 1984 specified tax increases of $12 billion in 1984, $15 billion in 1985, and $46 billion in 1986. No major tax

legislation was enacted between the passage of the budget resolution and the end of the first session of the 98th Congress, although both tax-writing committees reported out bills with relatively modest revenue increases (about $5 billion to $10 billion over the 1984-1986 period). CBO baseline revenues do not include the revenue increase targets of the budget resolution, but include enacted legislation only.

The Social Security Amendments of 1983 were signed into law on April 20, 1983. The need for significant changes in the system had been widely acknowledged. The Old-Age, Survivors, and Disability Insurance (OASDI) program expenditures had exceeded revenues continuously since 1975, drawing down trust fund balances. Increased revenues were needed to ensure the payment of scheduled cash benefits even through 1983, if expected benefit increases were to be maintained. In addition, some combination of increased revenues and reduced benefits was required for solvency of the funds through the 1980s and then beyond when the baby boom generation will reach retirement age.

Congressional deliberations focused on the recommendations of the National Commission on Social Security Reform, which were reported in January 1983. While the amendments differed from the commission's recommendations in many particulars and included additional changes, they incorporated most of the commission's major proposals to raise revenues and reduce the growth in expenditures. Taken as a whole, the amendments raise unified budget revenues by $6.1 billion in 1984, growing to $29.6 billion in 1989 (see Table 15).

In order to increase OASDHI trust fund receipts, the 1983 amendments expanded coverage of the programs, increased payroll tax rates, and initiated the partial taxation of benefits. Social Security coverage was extended to new federal employees, members of Congress, federal judges, the President, Vice-President, most executive-level federal political appointees, and employees of nonprofit organizations. State and local governments are no longer able to terminate coverage of their employees. This increased participation will raise revenues by over $1 billion in 1984 and by almost $6 billion by 1989.

The amendments raised 1984 Federal Insurance Contribution Act (FICA) tax rates for employers and employees and moved forward to 1988 (at a reduced level) the rate increase scheduled under prior law for 1990. For 1984 only, employees receive a credit against their Social Security tax liability equal to the total 0.3 percent increase in the tax rate. (The employer pays the full rate.) This year, therefore, the employee continues to pay at the 6.7 percent rate of prior law. The Social Security trust funds will receive a transfer from general revenues equal to the amount of the credit. Comparable changes were made in Tier I Railroad Retirement taxes.

TABLE 15. REVENUE EFFECTS OF THE SOCIAL SECURITY AMENDMENTS OF 1983 (By fiscal year, in billions of dollars, unified budget basis)

	1984	1985	1986	1987	1988	1989
Baseline Revenue Increase by Major Provision						
Increased coverage	1.5	2.6	3.3	4.0	4.9	5.7
Tax rate increases	3.8	3.0	2.0	2.4	13.7	19.2
Taxation of benefits	0.9	3.2	3.8	4.5	5.4	6.4
Other provisions	a/	-0.3	-0.3	-0.3	-1.6	-1.7
Total baseline revenue increase	6.1	8.6	8.8	10.7	22.4	29.6
Baseline Revenue Increase by Major Tax Source						
Social Security revenues	6.2	6.0	5.7	6.9	19.1	25.5
Other	b/	2.6	3.1	3.8	3.3	4.1
Total baseline revenue increase	6.1	8.6	8.8	10.7	22.4	29.6
ADDENDUM						
Transfers from General Revenues into OASDHI Trust Funds c/						
For FICA Credits d/	3.3	1.2	0.0	0.0	0.0	0.0
For SECA Credits e/	0.8	2.4	2.2	2.1	2.2	2.4
For Taxation of Benefits f/	2.3	3.4	4.1	4.9	5.8	6.8
Total transfers	6.4	7.1	6.3	7.0	8.0	9.2

a. Less than $500 million.

b. Between $0 and -$500 million.

c. Transfers from general revenues do not appear in the unified budget.

d. Federal Insurance Contributions Act.

e. Self-Employment Contributions Act.

f. Money is transferred into the Social Security trust funds based on estimated tax collections before the actual taxes are paid. This accounts for the difference between the estimates of the taxation of benefits (in the upper part of the table) and the transfer from general revenues for the taxation benefits.

In addition, Self-Employment Contributions Act (SECA) tax rates were raised to equal the combined employee/employer rates beginning in 1984. Self-employed workers will receive a sliding-scale tax credit beginning in 1984 and phasing out by 1990. This credit will also be financed from general revenues. Taken together, the amendments increase FICA and SECA taxes by $3.8 billion in 1984, rising to $13.7 billion in 1988 when the second step in the rate increases is put in place (see Table 15).

The remaining major revenue-raising provisions of the amendments are those that initiate taxation of part of Social Security (and Tier I Railroad Retirement) benefits beginning in 1984. Up to one-half of the benefits are included in taxable income when "combined income" exceeds $25,000 for single taxpayers or $32,000 for married couples filing jointly. Combined income equals adjusted gross income plus tax-exempt interest income and one-half of Social Security benefits above this threshold. Taxation of benefits raises revenues by about $1 billion in 1984, and by over $6 billion by 1989. These revenues, which are included in CBO baseline individual income tax revenues, are earmarked for the trust funds.

The Railroad Retirement Solvency Act (P.L. 98-76), signed into law on July 12, 1983, also raised Tier II payroll tax rates for this fund and provided for the income taxation of Tier II and dual benefits, adding approximately an additional $1 billion per year to social insurance revenues.

The Revenue Share of GNP, 1984-1989

Under baseline assumptions, revenues for 1984-1989 measured as a percentage of GNP exhibit two main characteristics: they are near average levels for the post-1960 period, and they are relatively stable as compared to other six-year intervals (see Figure 7).

Without the Social Security Amendments, the revenue share would be declining slightly over the 1984-1989 period. The federal revenue share of GNP has varied for the most part between 17 percent and 19 percent of GNP, occasionally peaking higher--typically during or after wars--and being reduced periodically by legislation. The late 1970s were an exception to this general pattern: sustained inflation pushed individual income taxes up rapidly as Social Security taxes continued to grow steadily, bringing the revenue share of GNP to a post-World War II high of 20.8 percent in 1981.

The Economic Recovery Tax Act of 1981 (ERTA), combined with the 1980-1982 recessions, reduced the revenue share to 18.6 percent in 1983--even though the Tax Equity and Fiscal Responsibility Act (TEFRA) and the Surface Transportation Assistance Act, both enacted subsequently, raised

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revenues in 1983. Under baseline assumptions, the present tax structure generates an increase of 0.3 percent in the revenue share of GNP from 1984-1989. All of this growth is in the personal income and payroll tax components (see Figure 8). All other tax sources measured as percentages of GNP will remain constant or decrease slightly over the period, continuing well-established trends.

Individual income taxes increase from 8.2 percent of GNP in 1984 to 8.9 percent in 1989 (see Table 5, Chapter II). Although the tax brackets, the zero bracket amount, and personal exemptions are indexed to growth in the

Figure 8.

Revenue Sources as Percentages of GNP

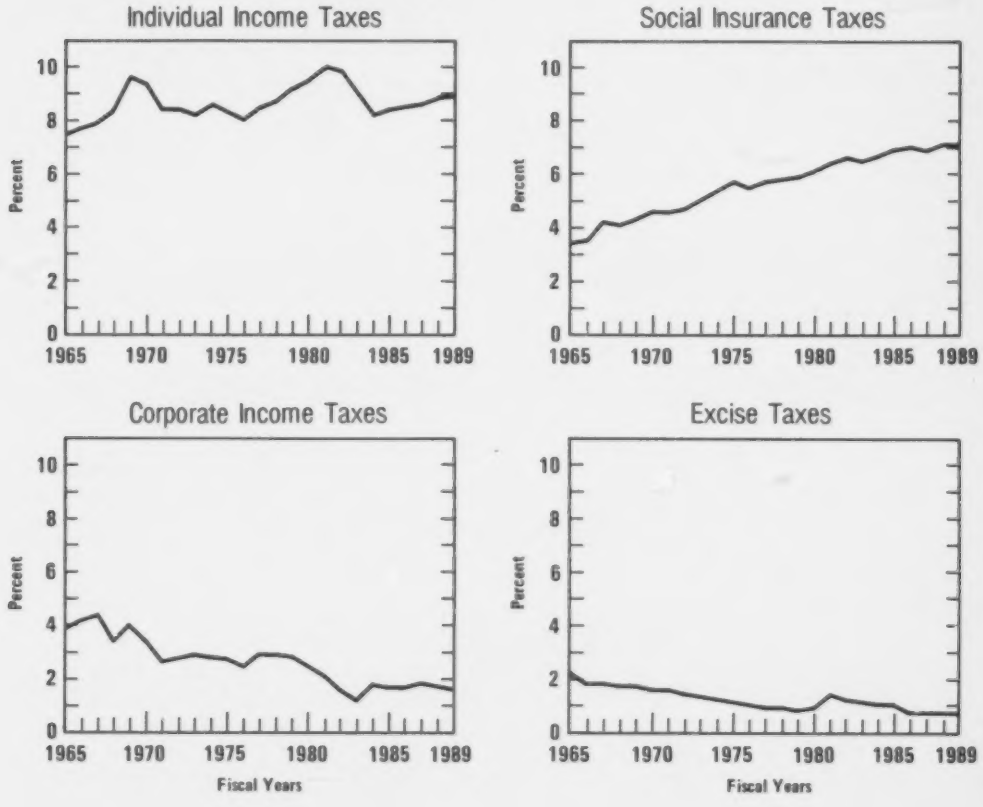
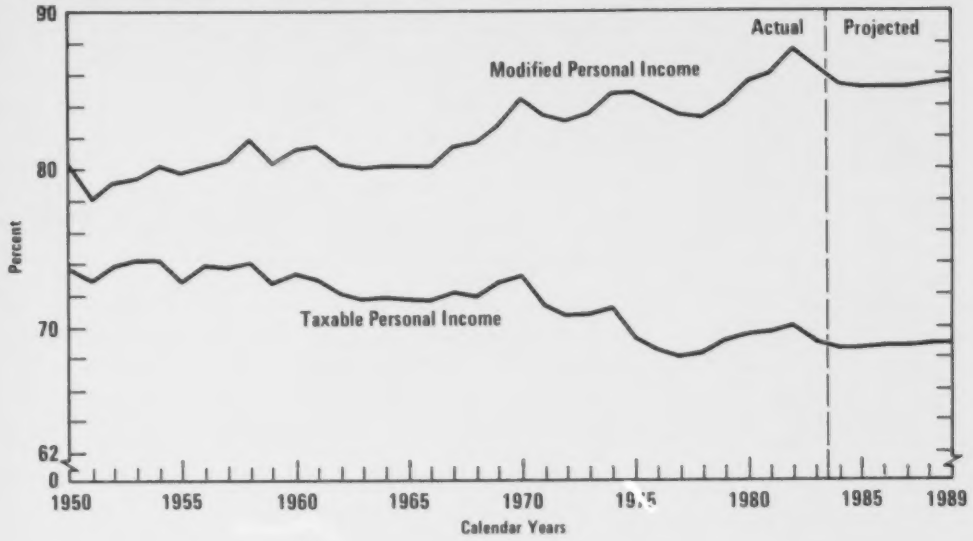


Figure 9.

Modified Personal Income and Taxable Personal Income as a Percentage of GNP



CPI beginning in 1985, real income growth (under CBO assumptions) moves taxpayers into higher tax brackets and generates revenue growth somewhat greater than income growth. Social insurance and corporate income tax revenues will continue distinctive long-term trends. The social insurance share of GNP increases from 6.7 percent in 1984 to 7.1 percent in 1989, compared to 2.9 percent in 1960. The corporate share decreases slightly to 1.6 percent of GNP in 1989, after remaining fairly steady at 1.7 percent to 1.8 percent for 1984-1988--compared to 4.3 percent of GNP in 1960.

Individual Income Taxes: Trends in Rates and Bases

The individual income tax share of GNP is determined by both the personal income share of GNP and the effective tax rate on this base. Figures 9 and 10 show two measures of the personal income share of GNP and average effective individual income tax rates from 1950 to 1989. Modified personal income is national income and product accounts (NIPA) personal income (which includes transfer payments and other nontaxable compensation) plus employee contributions to social insurance programs

(which are part of wages and salaries, but are excluded from NIPA personal income). Taxable personal income excludes income from nontaxable sources--nonwage labor income and government and business transfers to persons. It comprises wages and salaries, personal interest income, personal dividend income, rental income, and proprietors' income.

As Figure 9 shows, the individual income taxable base has always been significantly smaller than total personal income, and the gap between personal income and the taxable base has been increasing over time. The growth in this gap has several major causes: federal government transfer payments have been increasing, and nontaxable forms of compensation, in particular employer-provided fringe benefits, have also been increasing steadily as a share of income. 1/

Another source of tax base erosion, which reduces actual taxable income below the taxable personal income measure shown above, is the growth in the number and size of income adjustments, exclusions, and itemized deductions allowed under tax law. Many of these items, such as Individual Retirement Accounts, are projected to grow over the 1984-1989 period. The exclusion of increasingly larger components of income from the tax base raises the tax rates on the income remaining taxable that are necessary to produce a given amount of revenue.

Figure 10 also compares average effective personal income tax rates under existing tax law with rates under pre-ERTA law and rates under pre-ERTA law adjusted for the effects of inflation under baseline assumptions (see note under Figure 10). 2/ Effective rates under pre-ERTA law would have risen to an all-time high of 15.8 percent by 1989. Effective rates under existing tax law are estimated to remain slightly above those of the 1960s and early 1970s, but below those resulting from 1980 law adjusted for inflation. The net effect on individual income taxes of legislation since 1981 has been to provide real tax cuts, when considered in the aggregate, but real cuts significantly smaller than the tax cuts measured in nominal terms.

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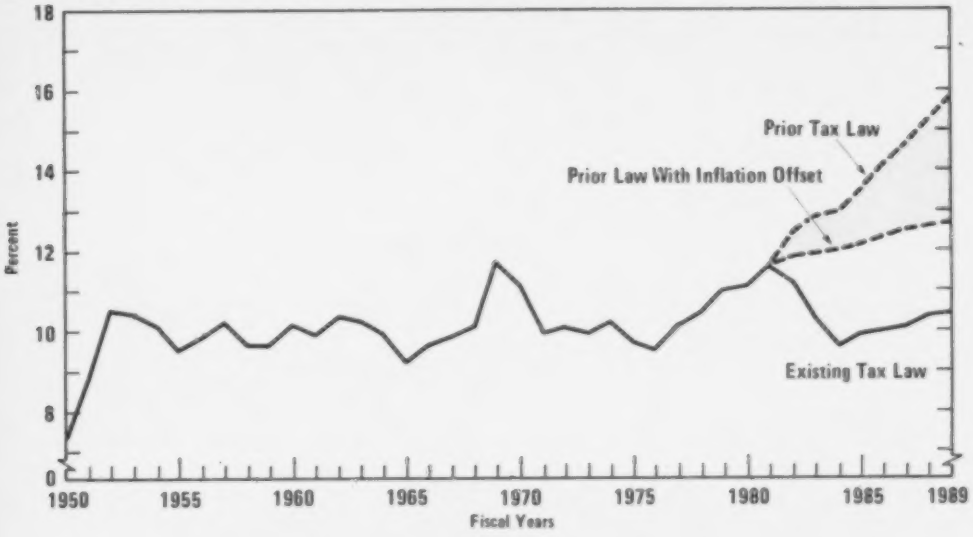
1. The employer's costs of providing fringe benefits that are excludable from employees' incomes are generally deductible by the employer as long as these costs constitute ordinary and necessary business expenses. Therefore, they are not taxed under either the individual or the corporate income tax.

2. The revenue effects of tax legislation since 1981 are shown in Appendix D.

Figure 10.

Individual Income Taxes as a Percentage of Modified Personal Income



NOTE: Inflation offsets are estimated by calculating the difference between the income tax revenues that would have been collected under 1980 tax law and those that would have been collected if individual income tax brackets, the zero bracket amount, and personal exemptions under 1980 tax law were adjusted for inflation. Individual income taxes for 1984-1989 under existing law are baseline projections shown in Table 5.

Corporate Income Taxes: Trends In Rates and Bases

The corporate income tax share of GNP is likewise determined by both the profits share of GNP and the effective tax rate on those profits. Figures 11 and 12 show two measures of the profits share of GNP and average effective corporate tax rates from 1950 to 1989. 3/ Economic profits are profits from current production: reported profits adjusted for distortions in the cost of replacing inventories and fixed capital used in current production. Domestic taxable profits is the NIPA concept closest to the actual corporate tax base. Domestic taxable profits are profits reported by corporations (with any overstatement due to inflation or understatement due to accelerated depreciation deductions), excluding profits of the Federal

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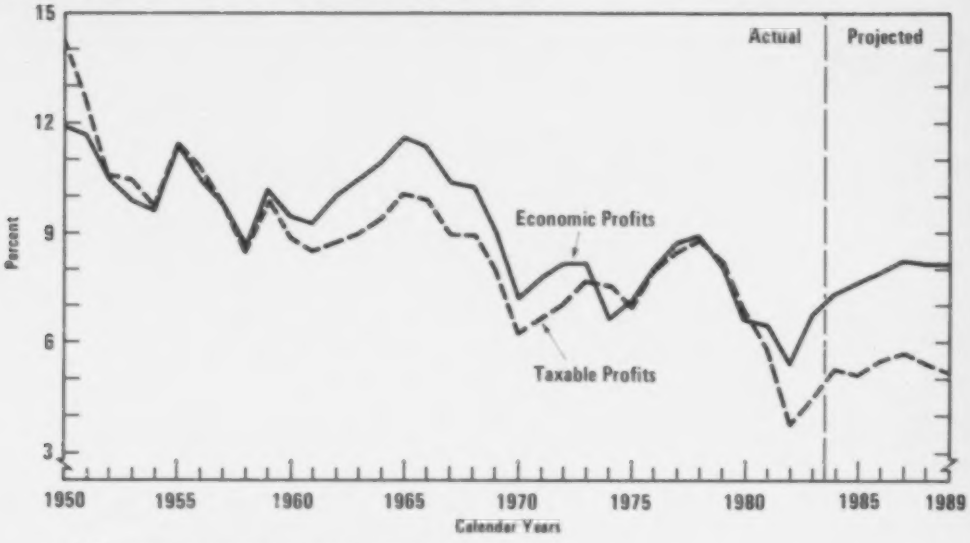
3. Both graphs use national income and product account (NIPA) concepts--corporate taxes are measured on an accrual basis instead of the cash flow basis of the unified budget, and thus are comparable in timing to the profits measures shown.

Figure 11.
Corporate Profits as a Percentage of GNP



NOTE: National Income and Product Account concepts.

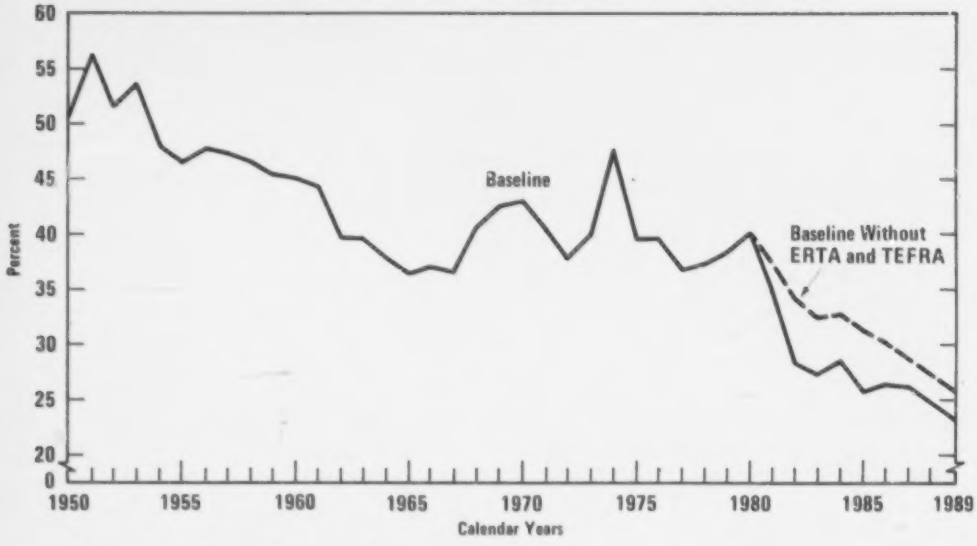
Reserve system and profits from foreign sources, and minus state and local corporate profits taxes.

The taxable profits share of GNP can differ from the economic profits share for many reasons. Inflation may erode the value of deductions for inventory and capital consumption, inflating taxable profits. When inflation is moderate, however, the accelerated depreciation allowed for tax purposes may exceed actual economic depreciation, and reduce taxable profits relative to economic profits. State taxes on business income reduce taxable profits relative to economic profits, because these taxes are deductible business expenses. The NIPA definition of economic profits includes the earnings of the Federal Reserve system, which are not subject to the federal income tax (although most of them are returned to the Treasury and counted as miscellaneous receipts in the unified budget and as corporate taxes in the NIPA). Finally, economic profits include a growing portion of profits earned by domestic corporations from investments abroad that receive special treatment under the U.S. tax code, and are generally not subject to significant U.S. taxes.

As Figure 11 indicates, the economic profits share of GNP, which is sensitive to the business cycle, has generally trended downward since the

Figure 12.

Corporate Income Taxes as a Percentage of Economic Profits



NOTE: National Income and Product Account concepts.

1950s, and is expected to rebound in 1984-1989 under baseline assumptions. Taxable profits generally follow the cyclical pattern of economic profits. They fell below economic profits in the 1960s because of the introduction of accelerated depreciation, and in the late 1960s and early 1970s because of the increasing importance of foreign-source profits and state taxes on business income. The high inflation rates of the later 1970s increased taxable profits relative to economic profits even though depreciation provisions had been further liberalized in 1971. Since 1981, and for 1984-1989, the taxable profits share of GNP remains considerably below the economic profits share for the following reasons:

- Depreciation deductions, which would have exceeded economic depreciation even before ERTA under the moderate baseline inflation rates for 1984-1989, were significantly increased by ERTA as modified by TEFRA.

- Federal Reserve earnings (not taxable under the income tax) remain high because of relatively high interest rates.

- Foreign source profits (not subject to significant U.S. taxes) continue to grow.

- State corporate income taxes, which are deductible, continue to grow.

The average effective tax rate on economic profits fell from about 50 percent in the early 1950s to around 37 percent in the mid-1960s, and to about 40 percent in 1980. This decline in the effective tax rate resulted from reductions in the statutory rate, the introduction of credits (principally the investment credit), and the introduction and extension of deductions and other benefits that narrowed the taxable base--partially offset by the high inflation rates of the middle and late 1970s.

Changes in the statutory tax rate or in tax credits affect corporate taxes by changing the tax rate. Changes in depreciation policy affect corporate taxes by changing the level of taxable profits relative to economic profits, without affecting the rate on taxable profits. With the moderate inflation rates in the CBO baseline economic projections for 1984-1989, taxable profits would be reduced relative to economic profits by the liberal depreciation policies in place before ERTA. This significant reduction in taxable profits would cause the average effective tax rate on economic profits to decline during the projection period, even in the absence of ERTA and even though the effective tax rate on taxable profits would be stable (see Figure 12).

The combined effect of ERTA and TEFRA is to return the average effective tax rate on taxable profits to about 31 percent in 1983-1989--noninvestment-related corporate income taxes were increased by TEFRA--but to increase the differential between taxable and economic profits by increasing amounts. (The significant acceleration in depreciation provided by ERTA was only partially scaled back by TEFRA.) The net effect of ERTA, TEFRA, and the relatively moderate inflation rates assumed, is a projected continuation in the decline in the tax rate on economic profits from 1983 through 1989.

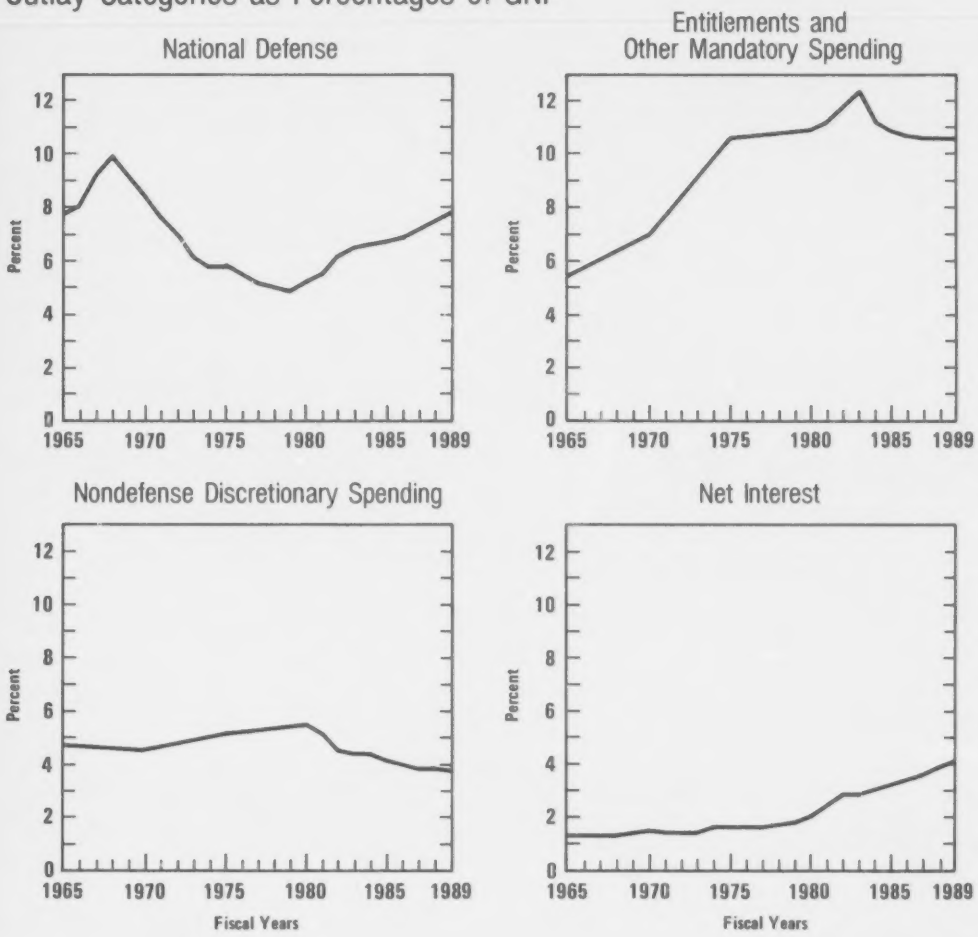
OUTLAY TRENDS

CBO estimates that 1984 outlays will represent 23.9 percent of GNP, a decline from 24.7 percent of GNP in 1983. The ratio of outlays to GNP is projected to decline a bit further in 1985 but grows thereafter, reaching 24.9 percent by 1989 (see Figure 7). While this share is little different from that of 1983, it is much higher than the levels of 10 or 25 years earlier. Federal government outlays were 18.0 percent of the nation's production in 1965 and an average of 20.7 percent from 1965 to 1981. This section of the report looks at the factors driving federal spending since 1965 and identifies the sources of future outlay growth.

Changes from 1965 to 1984

Changes in entitlements and defense tell the story of federal spending over the past 20 years. In the mid-sixties entitlements and defense grew simultaneously, as the start of Medicare, Medicaid, and other Great Society programs coincided with the Vietnam buildup (see Figure 13). Outlays surged from 18.0 percent of GNP in 1965 to 21.4 percent in 1968, as shown earlier in Figure 7. During the following ten years the ratio of total spending to GNP fluctuated around 21 percent. Entitlement spending continued

Figure 13.
Outlay Categories as Percentages of GNP



to grow, but the share of defense spending in GNP declined by about the same amount. By 1978, the ratio of total federal spending to GNP was the same as it had been in 1968.

From 1979 to 1983, defense and entitlements again grew in tandem. The defense increases reflected a redirection of national policy. But the entitlement increases were largely automatic, resulting from such factors as large cost-of-living increases early in the period, high levels of unemployment later on, and rapidly rising medical care costs throughout. As a result of these increases, total spending reached a record level of 24.7 percent of GNP in 1983.

As detailed in the previous chapter, CBO projects that dollar spending for entitlements and other mandatory programs will not grow at all in 1984 and that entitlement spending as a share of GNP will shrink to 11.2 percent. This decline in entitlements allows total spending in 1984 to fall to 23.9 percent of GNP, despite increases for defense and interest.

Looking back over the 1965-1984 period as a whole, one sees spending increase from 18.0 percent to 23.9 percent of GNP--an increase of 5.9 percentage points. This is virtually identical to the growth in entitlements over those years, as shown in Table 16. Four-fifths of the entitlement increases, in turn, have occurred in three large programs--Social Security, Medicare, and Medicaid. In the years since 1965, defense spending has fluctuated as a fraction of GNP, nondefense discretionary spending has risen slightly and then fallen off, and, in the past few years, interest costs have increased. But these other categories of spending are little different as a percentage of GNP, both individually and in total, than they were almost 20 years ago.

Most of the growth in spending over the 1965-1984 period, however, took place before 1981. From 1981 to 1984, the ratio of spending to GNP has grown by about one percentage point--from 22.8 percent to 23.9 percent. Defense and net interest have both increased as a share of GNP, but nondefense discretionary spending has declined. Entitlement spending claims the same share of GNP in 1984 as it did in 1981, as Table 16 illustrates.

Growth from 1984 to 1989

In CBO's baseline projections, federal budget outlays grow from $853 billion in 1984 to $1,342 billion by 1989--an increase of $489 billion over five years. The sources of growth in baseline spending after 1984 are detailed in Table 17. Defense and entitlements each contribute more than one-third of the total growth. Net interest costs, which rise as the debt mounts, represent another quarter of the spending growth. Nondefense discretionary spending accounts for less than 10 percent of the overall increase in outlays.

TABLE 16. GROWTH IN ENTITLEMENT OUTLAYS, 1965-1984
(By fiscal year, as a percentage of GNP)

	1965	1981	1984	Change 1965-1984	Change 1981-1984
Social Insurance Programs					
Social Security	2.5	4.7	4.9	2.3	0.2
Medicare	---	1.4	1.8	1.8	0.4
Other	0.6	0.9	0.8	0.1	-0.1
Means-Tested Programs					
Medicaid	*	0.6	0.6	0.5	*
Food stamps	*	0.4	0.3	0.3	-0.1
Other	0.7	0.9	0.8	0.1	-0.1
Federal Employee Retirement	0.4	1.1	1.1	0.7	*
Other	1.0	1.2	1.0	*	-0.2
Total	5.4	11.2	11.2	5.8	*

* Less than 0.05 percent.

The growth in defense spending can be divided into three parts. One part consists of the additional outlays resulting from extrapolating the defense figures in the budget resolution rather than inflating 1984 budget authority, as is assumed for other discretionary programs. These additional outlays are the cost of assuming a roughly 5 percent annual real increase in defense spending rather than no real growth, and they amount to $64 billion by 1989. The second portion of defense spending consists of the dollars necessary simply to maintain the real value of 1984 budget authority in the face of higher prices. These inflation adjustments add $81 billion to defense spending by 1989. Finally, defense spending would increase by $38 billion between now and 1984 even if defense budget authority were frozen at the 1984 dollar level because outlays do not yet fully reflect the increases in budget authority provided in recent years.

TABLE 17. SOURCES OF GROWTH IN BASELINE SPENDING AFTER 1984 (By fiscal year, in billions of dollars)

	1985	1986	1987	1988	1989
Defense					
Real defense growth	5	13	25	43	64
Discretionary inflation adjustments	6	20	38	58	81
Prior year increases in budget authority	18	27	33	36	38
Subtotal	29	60	96	137	184
Entitlements and Other Mandatory Spending					
Cost-of-living adjustments	8	22	35	48	61
Medical cost increases	6	13	20	28	36
Caseload increases	3	9	14	20	27
Increased medical care utilization	5	7	12	17	23
Farm price supports and other	4	5	9	17	24
Subtotal	26	56	90	130	171
Nondefense Discretionary Spending					
Discretionary inflation adjustments	3	7	12	19	26
Civilian agency pay raises	1	3	5	7	9
Other	2	3	5	7	8
Subtotal	5	12	22	32	42
Net Interest	18	37	60	86	111
Offsetting Receipts	-2	-6	-9	-12	-18
Total Growth from 1984	75	159	259	374	489

About three-fifths of the projected growth in entitlement programs results from price increases. Cost-of-living adjustments in indexed benefit programs account for $61 billion out of the projected $171 billion growth in entitlement spending over the next five years. Another $36 bilion is due to medical price increases, which push up Medicare and Medicaid costs. Increases in the number of people eligible for Social Security, Medicare and Medicaid, and other benefit programs raise spending by $27 billion, and increases in the utilization of medical care services by Medicare and Medicaid beneficiaries add $23 billion. The remaining growth in entitlement spending is due primarily to increases in farm price support payments.

Growth in nondefense discretionary programs has three major sources. First is the increase assumed in the baseline to keep the nonpay portion of discretionary spending up to date with inflation. These discretionary inflation adjustments amount to $26 billion by 1989, or more than half of the total growth. The second source of growth is pay raises for the employees of federal civilian agencies, which cumulate to $9 billion by 1980. The remaining growth largely reflects previously enacted spending increases, particularly the increases in highway and other transportation spending provided by the Surface Transportation Assistance Act of 1982 (P.L. 97-424).

The increases in net interest, as already discussed, result from the growing baseline deficits and the assumed continuation of relatively high interest rates. These interest costs, which threaten to consume an ever increasing share of the budget, can be reduced only by cutting other spending or raising taxes.

CHANGES IN BASELINE PROJECTIONS SINCE 1983

CBO's current baseline projections show lower deficits in the next few years than did the baseline projections for 1984-1988 published one year ago. The baseline deficit now projected for 1985, $195 billion, is almost $20 billion lower than last year's projection of $214 billion. Legislative actions are the major cause of this reduction--the tax increases and benefit cuts included in the Social Security Amendments of 1983, and the slowing in the growth of defense spending provided in the fiscal year 1984 budget resolution. More rapid economic growth also contributes to reducing the deficit, but technical reestimates to revenues and outlays offset some of the improvement caused by the legislative and economic changes, as shown in Table 18.

For 1988, however, this year's baseline deficit projection is $15 billion higher than last year's. While the changes in defense and Social Security

TABLE 18. CHANGES IN CBO BASELINE PROJECTIONS SINCE FEBRUARY 1983 (By fiscal year, in billions of dollars)[a]

	1984	1985	1986	1987	1988
Revenues					
February 1983 baseline	653	715	768	822	878
Legislative actions					
Social Security Amendments[b]	6	9	9	11	22
Railroad Retirement Solvency Act	*	1	1	1	1
Repeal of withholding on interest and dividends	-3	-2	-2	-2	-2
Other	*	*	*	*	*
Subtotal	4	7	8	10	22
Technical reestimates	-4	-6	-7	-8	-6
Economic reestimates	10	17	26	39	51
February 1984 baseline	663	733	795	863	945
Outlays					
February 1983 baseline	850	929	999	1,072	1,145
Legislative actions					
Defense	-1	-16	-22	-13	-4
Entitlements and other mandatory spending	1	-3	-7	-10	-11
Nondefense discretionary	1	*	*	-1	-1
Offsetting receipts	*	*	*	*	*
Debt-service savings	*	-1	-5	-9	-13
Subtotal	1	-20	-35	-33	-30
Technical reestimates	2	11	24	25	30
Economic reestimates	*	7	23	49	82
February 1984 baseline	853	928	1,012	1,112	1,227
Deficit					
February 1983 baseline	197	214	231	250	267
Legislative actions	-3	-26	-43	-43	-52
Technical reestimates	6	17	31	33	36
Economic reestimates	-10	-10	-3	10	31
February 1984 baseline	190	195	217	248	282

* Less than $500 million.

a. For the February 1983 baseline, see Congressional Budget Office, Baseline Budget Projections for Fiscal Years 1984-1988 (February 1983).

b. Net of individual income tax offsets resulting from increased payroll taxes.

hold down 1988 outlays and augment revenues, the legislative savings are overwhelmed by projections of higher interest rates, increased farm price support payments, lower outer continental shelf (OCS) leasing and royalty receipts, and other technical and economic changes.

Revenues

Baseline revenues are now estimated to be higher in each year of the 1984-1988 period than estimated by CBO one year ago (see Table 18). The main factor in the upward revisions in revenue estimates is the changed economic outlook, reflected most substantially in upward revisions in personal income. The other major factor in the higher revenue path is the Social Security Amendments. As mentioned above, the Social Security Amendments' tax increases are responsible for the upward drift in taxes as a percentage of GNP in the present baseline path, in contrast to the slight downward drift in last year's path (Table 15).

Changed Economic Outlook. The higher levels of output and employment in the current CBO forecast generate higher levels of personal income and, therefore, more income taxes and more Social Security and other payroll taxes. Corporate profits are also higher in the current forecast, but higher projected levels of investment increase accelerated depreciation deductions and investment tax credits enough to more than offset the revenue-generating effects of higher profits. Therefore, corporate income taxes have been revised downward for 1985-1989.

Downward revisions in oil price assumptions since last year result in lower estimated windfall profit taxes. Higher interest rate assumptions in the present baseline lead to higher Federal Reserve System payments. Overall, the changed economic outlook accounts for almost 90 percent of net upward revisions in the baseline.

Legislative Actions. Legislative actions raised revenues for 1984-1988. The Social Security Amendments of 1983 (along with the Railroad Retirement Solvency Act) accounted for almost all of the increase. There was one significant revenue reducer: the rescinding of withholding on interest and dividend income (P.L. 98-67) lowers income taxes by about $1.5 billion to $2.5 billion per year in 1984-1989. Other legislation enacted during the year, taken as a whole, reduces revenues by relatively minor amounts.

Technical Changes. The major component in the technical revisions in baseline revenues, about $5 billion per year, consists of upward estimates of revenue losses from the saving incentives enacted in the Economic Recovery

Tax Act of 1981, especially from the expanded availability of Individual Retirement Accounts. These revisions are based on preliminary tax return data for 1982. Such taxpayer behavior is related, in part, to economic conditions. However, these revised estimates are considered technical changes for the purpose of this comparison because they are not directly related to CBO macroeconomic assumptions. Other technical revisions, which occur in each major tax source, are relatively small and partially offsetting.

Outlays

Little has happened during the past year to affect CBO's estimate of baseline outlays for 1984. This year's estimate is $853 billion; last year at this time it was $850 billion. The baseline figures for 1985 are also very close, because legislative reductions in defense and Social Security and upward economic and technical reestimates have roughly balanced each other. For 1986 to 1988, however, this year's outlay projections are higher than those of last year, primarily as a result of higher interest rates and various technical changes.

Changed Economic Outlook. The prospect of continued high interest rates is the major economic factor causing this year's outlay estimates to be higher than last year's. For example, this year's baseline projections assume that the three-month Treasury bill rate will be 8.0 percent in 1988; last year's assumption was 5.9 percent. By themselves, these higher interest rates add $18 billion to baseline outlays in 1985 and $60 billion in 1988. In the early years of the projection, some of this increase in interest costs is offset by a more rapid economic recovery and a reduction in the projected rate of unemployment. In 1987 and 1988, however, an increase in the assumed inflation rate also pushes up outlays.

Legislative Actions. Congressional action during 1983 reduced spending in 1985 and later years. The Social Security Amendments of 1983 delayed cost-of-living adjustments for Social Security cash benefits and instituted a more stringent hospital reimbursement system for Medicare. The fiscal year 1984 Congressional budget resolution, which underlies the current baseline defense projections, scaled back the rate of growth of defense spending from the levels in the 1983 budget resolution. Finally, the legislated increases in revenues and reductions in spending reduced debt-service costs. Legislative actions had little effect on nondefense discretionary spending or offsetting receipts compared to last year's baseline.

Technical Changes. Three major technical changes increase outlays in each year of the projections. Farm price support outlays are projected to

increase as market prices rise less rapidly than target prices. Estimated receipts from outer continental shelf leases and royalties have been reduced, based on bids in recent sales, lower forecasts of gas production and gas and oil prices, and delays in anticipated escrow releases. And net interest is higher because of lower interest receipts from the Federal Financing Bank, from unemployment insurance loans to the states, and from OCS escrow releases.

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CHAPTER IV. SENSITIVITY OF THE BUDGET TO ECONOMIC ASSUMPTIONS

Budget projections are highly sensitive to the economic assumptions on which they are based. Changes in economic conditions can have major effects on revenues, outlays, and the deficit. Yet forecasting economic conditions is subject to great uncertainty. Although CBO believes that the economic assumptions underlying the baseline are reasonable, there is a good chance that the economy will perform differently than assumed. Consequently, this chapter examines how the baseline budget figures would vary under alternative economic assumptions.

This chapter illustrates the effects of alternative economic assumptions in two ways. First, it provides some rough orders of magnitude, or rules of thumb, for gauging the effects of changes in individual economic variables on the budget. It examines the impact on budget receipts and outlays of separate one-percentage-point changes in four economic variables: the rate of growth of real output, the unemployment rate, interest rates, and inflation.

A second, and more realistic, approach to calculating the sensitivity of the baseline budget projections to changes in economic conditions is to use a fully consistent alternative set of economic assumptions. This chapter therefore shows how the baseline deficit projections would differ under alternative high-growth and low-growth sets of assumptions.

RULES OF THUMB

The rules of thumb presented in this chapter are designed to give the reader a rough idea of the effects of small changes in individual economic variables on the baseline budget projections. When time is short, they can be used to approximate the effects of changing the baseline economic forecast and long-run assumptions.

The rules of thumb summarized in Table 19 illustrate the budgetary effects of a one-percentage-point change beginning in January 1984 for four variables: real economic growth, unemployment, interest rates, and inflation. The one-percentage-point change is assumed to occur each year in the 1984-1989 projections period. The rules of thumb show that:

TABLE 19. THE EFFECTS ON BASELINE BUDGET PROJECTIONS OF SELECTED CHANGES IN ECONOMIC ASSUMPTIONS
(By fiscal year, in billions of dollars)

	1984	1985	1986	1987	1988	1989
Real Growth: Effect of One-Percentage-Point Higher Annual Rate Beginning January 1984						
Change in revenues	4	15	28	46	65	88
Change in outlays	-1	-4	-7	-14	-23	-36
Change in deficit	-5	-18	-36	-60	-88	-124
Unemployment: Effect of One-Percentage-Point Higher Annual Rate Beginning January 1984						
Change in revenues	-20	-32	-35	-36	-36	-39
Change in outlays	4	8	13	18	23	29
Change in deficit	24	40	47	53	60	68
Interest Rates: Effect of One-Percentage-Point Higher Annual Rates Beginning January 1984						
Change in revenues	*	1	1	1	1	1
Change in outlays	3	9	13	18	26	31
Change in deficit	2	8	12	17	25	30
Inflation: Effect of One-Percentage-Point Higher Annual Rate Beginning January 1984						
Change in revenues	4	11	20	31	44	57
Change in outlays	3	13	25	38	55	70
Change in deficit	-1	2	5	6	10	13

* Less than $500 million.

- An increase in the real growth rate will increase revenues and decrease outlays and the deficit. The reverse is true for an increase in the unemployment rate.

- An increase in interest rates will raise outlays and the deficit. Under the assumptions used here, it will have only a small effect on revenues.

- Assuming that discretionary spending and interest rates respond to inflation, an increase in inflation will have little effect on the deficit, especially when measured as a percentage of GNP.

While the rules of thumb are instructive, they also have their limitations. First, they are not alternative economic forecasts. Sustained changes in one economic variable do not generally occur without changes in other variables as well. For example, higher unemployment may be accompanied by lower inflation, if both reflect a decrease in final demands in the economy. On the other hand, unemployment and inflation may increase simultaneously in response to an increase in commodity prices. The rules of thumb, however, treat changes in unemployment and inflation separately.

Second, the levels of the budgetary or economic variables can affect the sensitivity of the budget to changes in the economy. A change in interest rates, for instance, has a larger effect on outlays the larger the size of the deficits that must be financed. Third, the budgetary effects of increases and decreases in economic variables are not precisely symmetrical. Finally, adding up rules of thumb for two or more variables can produce misleading results, especially for revenues.

CBO does not rely on rules of thumb for preparing its budget projections. CBO's baseline economic forecast and long-run assumptions attempt to reflect all appropriate relationships among economic variables, including the effects of federal budgetary policies. In preparing its economic forecasts CBO relies heavily on judgment and reviews a wide range of information. CBO's budget estimates then take into account all the appropriate nuances of the economic forecast. Therefore, these rules of thumb only approximate how the CBO baseline budget projections would change with a change in the economic outlook.

Real Growth and Unemployment

The first two rules of thumb illustrate in different ways the effects of different assumptions about overall economic activity. The higher real

growth scenario (Table 20) shows the effects of a one-percentage-point increase in the annual rates of growth of real and, therefore, nominal gross national product relative to the baseline starting in the first quarter of calendar year 1984. The higher unemployment rate alternative (Table 21) illustrates a one-percentage-point increase in the unemployment rate starting at the same time. Higher growth increases revenues, lowers outlays, and reduces the projected deficits, while higher unemployment does the opposite.

The present estimates assume that higher growth is tied to lower unemployment, possibly resulting from an increase in aggregate demands. If higher economic growth were due to more rapid productivity increases, unemployment would be higher than assumed here and the budgetary effects would be different. Similarly, the higher unemployment path assumes a one-time drop in the rate of real economic growth.

Both paths assume that a 1.0 percentage point change in real output is associated with a 0.4 percentage point change in the unemployment rate. The higher growth case assumes a GNP path rising above the baseline by an additional 1 percent each year, exceeding baseline GNP by more than 5 percent in fiscal year 1989. By 1989, the additional economic growth drives down the unemployment rate by more than two percentage points (a level below that at which inflation is expected to accelerate). The higher unemployment case assumes a GNP path that is a constant 2.5 percent below the baseline for the entire period.

Unemployment compensation is, in the short run, the federal spending program most sensitive to the unemployment rate. This sensitivity has declined somewhat in the past several years, however, as the gap between the insured unemployment rate (those eligible for unemployment benefits) and the total unemployment rate has widened.

After a couple of years of higher unemployment, however, most of the change in outlays results from interest. Because lower real growth decreases revenues and increases noninterest spending, the federal debt is higher than it would otherwise be, and debt-service costs are correspondingly increased. In the case of higher real growth, the reverse is true.

Other spending programs respond to changes in real growth and unemployment less dramatically. The number of low-income persons eligible for Medicaid, food stamps, and assistance payments grows as unemployment rises. Social Security outlays also rise with unemployment, as persons who are eligible for benefits on the basis of old age are drawn onto the rolls in increasing numbers.

TABLE 20. THE EFFECTS ON BASELINE BUDGET PROJECTIONS OF A ONE-PERCENTAGE-POINT HIGHER REAL GROWTH a/
(By fiscal year)

	1984	1985	1986	1987	1988	1989
In Billions of Dollars						
Outlays						
Medicaid	*	-0.1	-0.2	-0.3	-0.4	-0.6
Social Security	--	*	-0.1	-0.2	-0.3	-0.4
Unemployment Compensation	-0.6	-1.6	-2.2	-3.5	-4.8	-6.9
Food Stamps	-0.1	-0.3	-0.5	-0.8	-1.1	-1.5
Assistance Payments	*	-0.1	-0.2	-0.3	-0.4	-0.5
Net Interest	-0.2	-1.4	-4.1	-8.7	-15.7	-25.6
Total	-1.1	-3.5	-7.4	-14.0	-22.8	-35.5
Revenues						
Individual Income Taxes	0.4	3.5	8.3	15.8	24.1	32.8
Corporate Income Taxes	2.3	7.6	13.7	19.9	26.6	36.5
Social Insurance Taxes	0.9	3.0	5.8	9.0	13.0	17.6
Other	0.3	0.5	0.7	0.9	1.1	1.3
Total	4.0	14.6	28.5	45.5	64.8	88.2
Deficit	-5.0	-18.1	-35.8	-59.5	-87.6	-123.7
As a Percent of GNP						
Deficit b/	-0.2	-0.5	-0.9	-1.4	-1.9	-2.5

* Less than $50 million.

a. Starting January 1984.

b. Difference between the baseline deficit as a percent of baseline GNP and the deficit calculated with higher real growth as a percent of its (higher) GNP.

TABLE 21. THE EFFECTS ON BASELINE BUDGET PROJECTIONS OF A ONE-PERCENTAGE-POINT HIGHER UNEMPLOYMENT RATE a/ (By fiscal year)

	1984	1985	1986	1987	1988	1989
	In Billions of Dollars					
Outlays						
Medicaid	0.1	0.2	0.2	0.2	0.3	0.3
Social Security	--	0.1	0.2	0.3	0.3	0.4
Unemployment Compensation	2.5	2.9	2.6	2.7	2.8	2.9
Food Stamps	0.4	0.5	0.6	0.6	0.6	0.7
Assistance Payments	0.1	0.2	0.2	0.2	0.2	0.2
Net Interest	0.9	4.4	8.8	13.6	19.0	24.9
Total	4.0	8.3	12.6	17.6	23.2	29.3
Revenues						
Individual Income Taxes	-7.2	-12.0	-14.0	-14.2	-14.6	-16.0
Corporate Income Taxes	-7.8	-13.1	-12.6	-12.4	-12.1	-12.4
Social Insurance Taxes	-3.9	-6.3	-7.4	-8.2	-9.0	-9.8
Other	-0.6	-0.7	-0.7	-0.7	-0.7	-0.7
Total	-19.5	-32.1	-34.7	-35.5	-36.4	-38.8
Deficit	23.5	40.4	47.2	53.2	59.6	68.1
	As a Percent of GNP					
Deficit b/	0.8	1.2	1.3	1.3	1.4	1.4

a. Starting January 1984.

b. Difference between the baseline deficit as a percent of baseline GNP and the deficit calculated with higher unemployment as a percent of its (lower) GNP.

As mentioned above, higher real growth increases revenues, relative to the baseline, reinforcing the effect of reduced outlays in narrowing the deficit. Higher unemployment reduces revenues, again reinforcing the outlay effect, this time in widening the deficit. In both cases, the revenue effects exceed the outlay effects over the six-year period. However, if the higher unemployment rate case were extended beyond 1989, higher net interest costs would soon cause the outlay increases to dominate the revenue reductions.

The changes in revenues are directly related to changes in tax bases: wages and salaries, other personal income, corporate profits, and sales. Both the magnitude and the pattern of the revenue changes in the higher real growth rule of thumb differ from those in the higher unemployment rule of thumb, reflecting the different GNP paths assumed. As mentioned above, the higher growth case assumes a GNP path rising above the baseline by an additional 1 percent each year throughout the period, while the higher unemployment case assumes a GNP path that remains 2.5 percent below the baseline from 1984 on. The revenue increase in the higher real growth case grows from $4 billion in 1984 to $88 billion by 1989. The revenue decrease in the higher unemployment rate case is quite large initially, $20 billion in 1984 and $32 billion in 1985, but does not grow very much relative to GNP thereafter.

The higher growth and higher unemployment paths also entail differences in the mix of taxable income--wages and salaries, nonwage income, and corporate profits--because these sensitivity estimates reflect the historical evidence that higher real growth is associated with a shift of income shares from wages and salaries to corporate profits, while higher unemployment is associated with a decline in the corporate profits share and a rise in the wage and salary share of taxable personal income. Since these tax bases are subject to different effective tax rates, differences in overall effective tax rates result. However, changes in total taxable incomes and, less importantly, changes in average wage and salary levels, are the major determinants of the changes in revenues shown in these rules of thumb.

In summary, higher unemployment or real growth can have a substantial effect on the projected deficits. A continuous one-percentage-point increase in unemployment starting in January 1984 increases the deficit by $23.5 billion in fiscal year 1984, $40.4 billion in 1985, and $68.1 billion in 1989. A one-percentage-point increase in the real growth rate starting at the same time reduces the deficit by only $5.0 billion in 1984. If the increase in real growth is sustained, however, it will cut the deficit $123.7 billion by 1989.

Interest Rates

The rapid increase in the federal debt, resulting from large and growing deficits, has made the budget increasingly sensitive to interest rates. As shown in Table 22, a one-percentage-point increase in all government interest rates would increase the baseline budget deficit by about $25 billion after five years and $30 billion after six years. Because of the larger deficits now projected, this estimate is roughly twice as large as the comparable figure published by CBO about a year and a half ago.

Most of the increase in the deficit is attributable to higher net interest outlays. Higher interest rates directly increase interest costs on new

TABLE 22. THE EFFECTS ON BASELINE BUDGET PROJECTIONS OF ONE-PERCENTAGE-POINT HIGHER INTEREST RATES a/ (By fiscal year)

	1984	1985	1986	1987	1988	1989
	In Billions of Dollars					
Outlays						
Net Interest						
Caused directly by higher interest rates	2.4	7.6	11.2	14.5	19.8	21.9
Caused by resulting increase in deficit	0.1	0.7	1.8	3.3	5.5	8.4
Subtotal	2.5	8.3	13.0	17.8	25.4	30.3
Other	0.2	0.3	0.3	0.4	0.4	0.5
Total	2.7	8.6	13.3	18.2	25.8	30.8
Revenues	0.4	0.9	1.0	1.1	1.1	0.9
Deficit	2.3	7.7	12.3	17.1	24.7	29.9
	As a Percent of GNP					
Deficit	0.1	0.2	0.3	0.4	0.5	0.6

a. Starting January 1984.

borrowing and on refinanced debt. New borrowing in fiscal year 1984 is assumed to be about $185 billion in the base case ($203 billion in on- and off-budget deficits, offset by over $17 billion in cash reduction and other means of financing), of which about $36 billion had been accomplished before January 1984. Since on average this borrowing occurs about halfway through the remaining nine months of fiscal year 1984, the additional interest costs on this debt are roughly 1 percent of $149 billion for four-and-one-half months, or about $0.6 billion. In addition, about $410 billion of marketable debt is scheduled for refinancing at least once during the January-September period. Because some of this debt is refinanced more than once during the period, the average time to first maturity is only a little over three months; additional interest costs on this debt during fiscal year 1984 are roughly 1 percent of $410 billion for five months, or about $1.8 billion. Higher interest rates also increase by small amounts certain offsetting receipts included in net interest outlays, such as interest on Federal Financing Bank loans and on Treasury cash balances. The sum of these direct effects of higher interest rates in turn increases the deficit and leads to additional borrowing, raising interest outlays by another $0.1 billion in 1984.

The direct and indirect effects of higher interest rates cumulate dramatically, given the large and growing deficits in the baseline. From January 1984 to the end of fiscal year 1989, about $1,475 billion in new debt is added while about $830 billion of the pre-1984 marketable debt is refinanced. When applied to such a large volume of financing, the direct effect of higher interest rates grows to $22 billion by 1989, while the indirect effect--reflecting cumulatively higher borrowing--is over $8 billion.

In addition to net interest, projections of certain other federal programs are affected by interest rate assumptions. Most notably, the subsidy cost of guaranteed student loans rises automatically with increases in the three-month Treasury bill rate.

In contrast to outlays, revenues are little affected by the higher interest rate assumptions; the net effect is an increase in revenues of about $1 billion per year. This reflects, for the most part, an increase in the Federal Reserve System's earnings on its portfolio of government securities (most of which earnings are returned to the Treasury and considered to be budget receipts). Such payments are a relatively minor source of budget revenues, accounting for less than 3 percent of the total.

When interest rates rise, creditors are made better off and debtors worse off. For individual taxpayers as a group, the effects of higher rates often cancel out; some taxpayers are better off and some are worse off. Since this rule of thumb assumes that employment remains the same as in the baseline, no net effect on individual income taxes is assumed. The cor-

porate sector, however, tends as a whole to be a net debtor. Some trade-off between the higher Federal Reserve earnings and lower profits of private corporations is likely and is assumed here. The result is a reduction in corporate income taxes, which partly offsets the increase in Federal Reserve payments.

Borrowing

While the effects of changes in economic assumptions on deficits and, hence, on interest costs have been incorporated in the previous sensitivity estimates, it is interesting to examine the effects on interest costs of an exogenous change in borrowing (resulting from changes in revenues or noninterest outlays). Table 23 illustrates the effects of two possibilities: a one-time increase of $10 billion in exogenous borrowing and an increase of $10 billion in each year.

The first alternative assumes an additional $10 billion of borrowing in fiscal year 1984 only. This increase is assumed to be financed halfway through the three-quarters of the fiscal year remaining after January. Thus, as a rough approximation, the first-year effect on interest costs is equal to $10 billion borrowed for three-eighths of a year at a 10 percent interest rate, or about $0.4 billion. The second-year effect of $1.2 billion reflects the full 12 months effect of the previous year's additional borrowing and also begins to show the effects of compounding of interest costs.

TABLE 23. THE EFFECTS ON INTEREST COSTS OF HIGHER FEDERAL BORROWING (By fiscal year, in billions of dollars)

	1984	1985	1986	1987	1988	1989
Effect of $10 Billion Borrowing in 1984 a/	0.4	1.2	1.2	1.4	1.5	1.6
Effect of $10 Billion Borrowing Each Year	0.4	1.7	2.9	4.2	5.6	7.1

a. Assumes $10 billion in additional borrowing resulting from changes in revenues or noninterest outlays; further increases in borrowing would result from additional interest costs.

The second alternative shows the effect of borrowing $10 billion more than the baseline amounts each and every year. This path starts out the same as the previous one, but grows by over $1 billion per year, as the interest costs on the additional debt mount. By 1989, the additional spending (or lower revenues) of $10 billion per year is actually costing the taxpayer $17.1 billion, including additional interest costs.

Inflation

About 30 percent of budget outlays are directly indexed to changes in the Consumer Price Index (CPI) or similar indexes. The individual income tax, which accounts for almost half of total revenues, will be indexed for inflation beginning in 1985.

Recent legislation and declines in inflation have slightly decreased the sensitivity of indexed outlay programs to inflation. The Social Security Amendments of 1983 (P.L. 98-21) delayed the Social Security cost-of-living adjustment (COLA) from July (based on the most recent first-quarter-over-first-quarter increase in the CPI) to January (based on the third-quarter-over-third-quarter increase). As a result, a change in inflation starting in January of a fiscal year has no effect on Social Security benefits until the following fiscal year, and the effect on benefits in later years is correspondingly reduced. In addition, the Omnibus Budget Reconciliation Act of 1981 (P.L. 97-35), by placing a temporary floor on the COLA paid to federal civilian and military retirees under age 62, made federal retirement outlays less sensitive to changes in inflation when inflation rates are low.

Some outlays, while not explicitly indexed, tend to respond more or less automatically to changes in the inflation rate. These outlays are generally those associated with programs in which the federal government is paying for the cost of services provided to eligible families and individuals, notably Medicare and Medicaid. Unemployment benefits also rise with inflation as workers' wages grow.

As discussed in Chapter I, the baseline budget projections assume that discretionary appropriations are adjusted to keep pace with inflation (or, in the case of defense, to produce a particular real growth rate). These adjustments, however, require legislation and are not automatic, as are the increases in the directly and indirectly indexed programs.

In computing the sensitivity of spending to inflation CBO has assumed that nominal interest rates will rise by one percentage point with a one-percentage-point increase in inflation. Previous CBO rules of thumb did not adjust nominal interest rates for changes in inflation. CBO believes that

this new assumption of constant real interest rates provides a more meaningful estimate of the effect of inflation on the budget. The direct effect on net interest outlays of a one-percentage-point increase in inflation is the same as the direct effect of a one-percentage-point increase in interest rates (shown previously in Table 22). In addition, net interest outlays will change insofar as changes in revenues and other outlays affect the deficit.

As shown in Table 24, the additional revenues generated by a one-percentage-point increase in inflation partly offset the deficit-widening effect of higher outlays. The higher inflation, however, which is assumed to be generated domestically, generates less additional revenue than an equal increase in real economic growth (see Table 20). If the higher inflation were assumed to be generated externally, through higher import prices, it would produce less of an increase in U.S. taxable incomes and, therefore, in revenues.

The more-than-proportional sensitivity of the progressive individual income tax to increases in inflation will be substantially tempered by the indexing of the tax brackets, the zero bracket amount, and personal exemptions beginning in 1985. The indexing will take place with a lag; adjustments for each calendar year will be tied to the increase in the CPI in the previous fiscal year. If indexing were not in effect, the revenue increase resulting from a one-percentage-point increase in inflation would be about $80 billion higher by 1989 than shown in Table 24.

Higher inflation also has a smaller effect on corporate income taxes than higher real growth. This results because higher inflation, when considered alone, raises only the taxable portion of an almost unchanged share of GNP going to the corporate sector (the economic profits share). Higher real growth, however, when considered alone, tends to be associated with a higher economic profits share of GNP.

The effects of higher inflation and higher real growth on social insurance receipts are about the same, but the explanations are different. In the higher inflation case, employment is held at baseline levels; the increases in Social Security contributions (the major component of social insurance revenues) reflect higher average wages and, in later years, induced increases in the maximum levels of wage subject to tax. (The taxable maximum is indexed to average earnings with a two-year lag.) In the real growth case, employment is considerably higher than in the baseline, while average wages are assumed to be only slightly higher. The wage bill thus rises, and the resulting increase in Social Security revenues is only slightly smaller than in the higher inflation case. Unemployment insurance receipts, which are higher in the real growth case because of higher employment, offset most of this difference.

TABLE 24. THE EFFECTS ON BASELINE BUDGET PROJECTIONS OF A ONE-PERCENTAGE-POINT HIGHER INFLATION RATE a/
(By fiscal year)

	1984	1985	1986	1987	1988	1989
In Billions of Dollars						
Outlays						
Automatically Indexed Programs						
Social Security	--	0.9	2.7	4.9	7.3	10.0
Federal employee retirement	--	0.1	0.5	1.0	1.6	2.2
Other	--	0.2	0.7	1.2	1.8	2.3
Subtotal	--	1.2	3.9	7.1	10.7	14.5
Indirectly Indexed Programs						
Medicare and Medicaid	0.3	0.7	1.2	2.0	3.0	4.1
Other	0.2	0.5	0.7	0.9	1.1	1.3
Subtotal	0.5	1.2	1.9	2.8	4.0	5.4
Discretionary Appropriations b/						
Defense	--	2.0	4.8	8.4	12.8	18.1
Nondefense	--	1.1	2.5	3.9	5.7	7.5
Subtotal	--	3.1	7.3	12.3	18.5	25.6
Net Interest						
Due to higher nominal interest rates	2.4	7.6	11.3	14.5	19.8	21.9
Due to different deficits	*	*	0.3	0.9	1.8	3.0
Subtotal	2.3	7.6	11.6	15.4	21.6	24.9
Total	2.8	13.1	24.7	37.6	54.8	70.4
Revenues						
Individual Income Taxes	1.4	4.8	8.5	14.1	20.5	26.8
Corporate Income Taxes	0.6	2.0	3.9	5.9	7.9	10.1
Social Insurance Taxes	0.9	3.0	5.7	8.9	13.2	17.7
Other	0.7	1.6	2.0	2.6	2.7	2.7
Total	3.6	11.4	20.0	31.5	44.3	57.3
Deficit	-0.7	1.7	4.6	6.1	10.5	13.1
As a Percent of GNP						
Deficit c/	*	*	*	*	*	-0.1

* Less than $50 million, or 0.05 percent.
a. Starting January 1984.
b. Including federal employee pay raises.
c. Difference between the baseline deficit as a percent of baseline GNP and the deficit calculated with higher inflation as a percent of its (higher) GNP.

Because the baseline projections assume that virtually all revenues and spending are either explicitly or implicitly adjusted for inflation, higher inflation has a small effect on the baseline deficit. In the first year, revenues rise more than outlays, which respond less rapidly to higher inflation. In later years, outlays increase more than revenues because higher nominal interest rates magnify the costs of servicing the growing national debt. By 1989, a one-percentage-point increase in inflation has added $13 billion to the deficit. But as a share of nominal GNP, which has also increased because of the rise in the price level, the deficit declines slightly. If nominal interest rates were not assumed to move with the rate of inflation, the deficit would decline both in dollars and as a percent of GNP.

ALTERNATIVE ASSUMPTIONS

Though it is useful to examine the budgetary effects of changes in individual economic variables, a sustained change in one variable is unlikely to occur in isolation. To illustrate the possibilities, CBO has prepared alternative high-growth and low-growth sets of economic assumptions, detailed in Table 25.

The first alternative is a high-growth path that is patterned after the long economic expansion of the 1960s. Growth in real GNP averages 5 percent per year over the projections period--one percentage point higher than the baseline. Half of the faster growth is assumed to result from more rapid productivity growth and half from stronger demands. Inflation accelerates in the later years, as the unemployment rate falls below the noninflationary level. Real interest rates are assumed to be about one percentage point lower than the baseline in 1984 and more than two percentage points lower by 1989.

The sluggish growth in the second alternative is similar to that of the 1970s. In this case, real growth averages only about 3 percent per year, partly because of a recession assumed in 1986. This low rate of growth leaves unemployment higher at the end of the projections period than at the beginning, although it does produce a continuing reduction in inflation. Real interest rates are assumed to be about 1-1/2 percentage points higher than in the baseline in 1984, but the gap is assumed to disappear by the end of the projections period.

Table 26 compares the revenues, outlays, and deficits resulting from these alternative economic assumptions with the baseline projections. As would be expected, the deficits are considerably higher in the low-growth alternative, especially when measured as a fraction of GNP, and much lower in the high-growth case (see Figure 14). By 1989, the deficit reaches 8.2

TABLE 25. ALTERNATIVE ECONOMIC ASSUMPTIONS
(By calendar year, in billions of dollars)

	1984	1985	1986	1987	1988	1989
Gross National Product (GNP)						
Current dollars (percent change, year to year)						
High-growth alternative	11.4	10.6	10.0	10.3	10.6	10.9
CBO baseline projection	10.3	9.4	8.6	8.4	8.1	7.8
Low-growth alternative	9.8	8.8	3.6	5.3	6.3	5.2
Constant (1972) dollars (percent change, year to year)						
High-growth alternative	6.4	5.1	4.5	4.5	4.4	4.3
CBO baseline projection	5.4	4.1	3.5	3.5	3.4	3.3
Low-growth alternative	4.9	3.6	-0.9	2.1	3.8	3.1
Prices						
GNP deflator (percent change, year to year)						
High-growth alternative	4.7	5.2	5.2	5.5	5.9	6.3
CBO baseline projection	4.7	5.1	4.9	4.7	4.5	4.3
Low-growth alternative	4.7	5.0	4.5	3.2	2.4	2.0
Consumer Price Index (percent change, year to year)						
High-growth alternative	4.8	5.2	5.2	5.5	5.9	6.3
CBO baseline projection	4.8	5.1	4.9	4.7	4.5	4.3
Low-growth alternative	4.8	5.0	4.5	3.2	2.4	2.0
Civilian Unemployment Rate (percent, annual average)						
High-growth alternative	7.7	6.8	6.3	5.9	5.6	5.2
CBO baseline projection	7.8	7.3	7.0	6.8	6.6	6.5
Low-growth alternative	8.0	7.6	8.5	9.6	9.0	8.9
Interest Rate (91-day Treasury bills, percent, annual average)						
High-growth alternative	8.0	7.6	7.1	7.3	7.3	7.4
CBO baseline projection	8.9	8.6	8.4	8.2	8.0	7.8
Low-growth alternative	10.4	9.5	8.0	7.0	6.0	5.6

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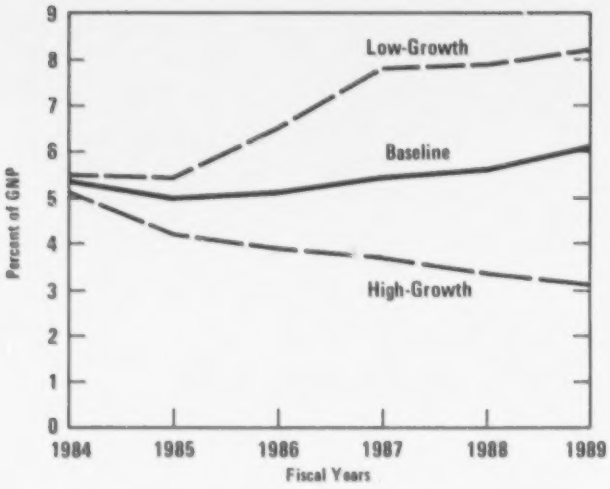
TABLE 26. BUDGET PROJECTIONS UNDER ALTERNATIVE ECONOMIC ASSUMPTIONS (By fiscal year)

	1984	1985	1986	1987	1988	1989
	In Billions of Dollars					
Revenues						
High-growth alternative	668	750	825	913	1,024	1,137
CBO baseline projection	663	733	795	863	945	1,016
Low-growth alternative	660	727	754	782	843	890
Outlays						
High-growth alternative	850	917	995	1,089	1,202	1,323
CBO baseline projection	853	928	1,012	1,112	1,227	1,342
Low-growth alternative	856	936	1,020	1,112	1,200	1,280
Unified Budget Deficit						
High-growth alternative	182	168	170	176	178	186
CBO baseline projection	190	195	217	248	282	326
Low-growth alternative	196	209	267	329	357	390
	As a Percent of GNP					
Revenues						
High-growth alternative	18.6	18.8	18.8	18.9	19.2	19.2
CBO baseline projection	18.6	18.7	18.7	18.7	19.0	18.9
Low-growth alternative	18.6	18.8	18.5	18.5	18.6	18.7
Outlays						
High-growth alternative	23.7	23.1	22.7	22.6	22.6	22.4
CBO baseline projection	23.9	23.7	23.8	24.1	24.6	24.9
Low-growth alternative	24.1	24.2	25.0	26.2	26.5	26.9
Unified Budget Deficit						
High-growth alternative	5.1	4.2	3.9	3.7	3.3	3.1
CBO baseline projection	5.3	5.0	5.1	5.4	5.6	6.1
Low-growth alternative	5.5	5.4	6.5	7.8	7.9	8.2

Figure 14.

Federal Deficit Under Alternative Economic Assumptions



percent of GNP on the low-growth path, compared to 6.1 percent in the baseline and 3.1 percent in the high-growth case. The gap between the high-growth and the baseline deficits grows smoothly over the projections period, while that between the low-growth and the baseline deficits peaks in 1987 because of the assumed recession. In dollar terms, the 1989 deficit reaches $390 billion in the low-growth case, $326 billion in the baseline, and $186 billion in the high-growth alternative.

The differences between baseline revenues and those in the high-growth and and low-growth alternatives result primarily from differences in the assumed rates of real economic growth. The ratio of revenues to GNP is only slightly higher than the baseline in the high-growth case and modestly lower in the low-growth case.

Outlays in the three paths, on the other hand, differ considerably in relation to GNP. In the high-growth path, outlays are lower than the baseline. As in the real-growth rule of thumb discussed earlier, the lower unemployment rate in the high-growth alternative holds down spending for unemployment compensation and certain other benefit programs. Moreover, lower interest rates and deficits reduce net interest outlays. Conversely, outlays in the low-growth path are, as a fraction of GNP, higher than in the baseline. The difference is smaller than that between the baseline and the high-growth path, however, because the higher deficits offset, rather than accentuate, the effect of lower interest rates on net interest outlays.

As these alternative projections indicate, the economic assumptions inject a considerable amount of uncertainty into the long-run budget numbers. Relatively small changes in assumptions can easily add or subtract $10 billion or $20 billion from the 1989 deficit estimate, and larger changes can affect the estimate by $100 billion or more. The baseline economic assumptions nevertheless represent, in CBO's judgment, a more reasonable basis for budget projections than either of the alternatives. Even on the high-growth path, however, the deficits remain at levels rarely seen prior to the 1980s.

APPENDIX A. BASELINE CONCEPTS AND ASSUMPTIONS

Baseline budget projections are designed to show what federal government revenues and spending would be in future years if current policies were continued without change. This appendix details the assumptions used in preparing the baseline projections for this volume.

The first section of the appendix describes the revenue baseline and identifies tax provisions that are scheduled to expire during the 1984-1989 projections period. The remaining three sections explain the baseline projections of budget authority and outlays.

BASELINE REVENUES

Baseline revenues are, with two exceptions, revenues generated under existing tax law. Airport and airway trust fund taxes are assumed to be extended at current rates beyond their scheduled expiration date of December 31, 1987. Likewise, highway trust fund taxes are assumed to be continued beyond September 30, 1988.

All other tax provisions that are scheduled to expire between 1984 and 1989 are assumed to do so as specified in law. Among these expiring provisions are some energy tax credit provisions as well as the temporary cigarette and telephone excise tax increases enacted in the Tax Equity and Fiscal Responsibility Act of 1982. Table A-1 lists significant temporary tax provisions (other than the airport and airway trust fund and the highway trust fund taxes) and their expiration dates.

OVERVIEW OF BASELINE SPENDING CONCEPTS

Baseline spending projections are designed to show what federal government budget authority and outlays would be in future years if current policies were continued without change. The basic methodology for projecting the different types of spending--direct spending programs and discretionary appropriations--is summarized in this section of the appendix. The next section describes in detail the defense baseline. The final section discusses the special assumptions made for nondefense spending programs in cases where those assumptions differ from the basic methodology or require further details.

TABLE A-1. TAX PROVISIONS EXPIRING DURING 1984-1989 PERIOD

Provisions	Dates of Expiration
Revenue-Raising Provisions (Expiration of Legislation Causes Revenue to Decline If All Else Remains the Same)	
Excise Taxes a/	
Cigarettes	September 30, 1985
Hazardous Substance Trust Fund	September 30, 1985
Post Closure Trust Fund	September 30, 1985
Telephone	December 31, 1985
Other	
Supplemental Unemployment Compensation b/	March 31, 1985

	1984	1985	1986	1987	1988	1989
Net Revenue Effect c/ (in billions of dollars)	--	--	-5	-5	-6	-6

Revenue-Losing Provisions (Expiration of Legislation Causes Revenues to Increase If All Else Remains the Same)	
Energy Tax Expenditures	
Residential Energy Credits	December 31, 1985
Credit for Geothermal Equipment	December 31, 1985
Credit for Solar and Wind Property	December 31, 1985
Credit for Ocean Thermal Energy Conversion Equipment	December 31, 1985
Credit for Small-Scale Hydroelectric Facilities	December 31, 1985
Credit for Biomass Property	December 31, 1985
Credit for Intercity Buses	December 31, 1985
Exclusion of Interest on State and Local Bonds for Small-Scale Hydroelectric Facilities	December 31, 1985

(Continued)

TABLE A-1. (Continued)

Provisions	Dates of Expiration
Exclusion of Interest on Industrial Revenue Bonds for Steam or Alcohol-Producing Facilities Using Solid Waste	December 31, 1985
Carryover Provision for the Residential Energy Tax Credit	December 31, 1987
Credit for Small-Scale Hydroelectric Facilities for which Application has been Docketed by the Federal Energy Regulatory Commission before January 1, 1986	December 31, 1988
Other Tax Expenditures	
Suspension of Regulations Relating to Allocation under Section 861 of Research and Experimental Procedures	August 14, 1984
Refunds of Gasoline Excise Taxes on Fuels Used in Taxicabs	September 30, 1984
Exclusion of Contributions to Prepaid Legal Services Plans	December 31, 1984
Targeted Jobs Tax Credit	December 31, 1984
Exclusion of Interest on State and Local Bonds for Mass Transit	December 31, 1984
Exclusion for Armed Forces Health Professionals Scholarship Awards	December 31, 1984
Refunds, Deductions, and Credits under the Indian Tribal Government Tax Status Act of 1983	December 31, 1984
Exclusion for Employer-Provided Transportation	December 31, 1985
Credit for Increasing Research Activities	December 31, 1985
Public Utility Dividend Reinvestment Plans	December 31, 1985
Federal Employees Retirement Adjustment	December 31, 1985
Exemption from Unemployment Taxes for Alien Labor	January 1, 1986
Deduction for Charitable Contributions for Nonitemizers	December 31, 1986
Exclusion of Interest on State and Local Small-Issue Industrial Development Bonds	December 31, 1986
Credit for Employee Stock Ownership Plans (ESOPs)	December 31, 1987
Tax Credit for Orphan Drug Research	December 31, 1987
ACRS for Mass Transit Vehicles	December 31, 1987

(Continued)

TABLE A-1. (Continued)

	1984	1985	1986	1987	1988	1989
Net Revenue Effect (in billions of dollars)	--	--	1	3	8	9
Net Revenue Effect of All Provisions (in billions of dollars)	--	--	-3	-3	2	4

a. CBO baseline revenues assume extension of Airport and Airway Trust Fund and Highway Trust Fund taxes beyond 1987 and 1988, respectively. Therefore, the revenue loss from their expiration is not included here.

b. Part of unemployment payments are taxable under the income tax. The estimate included here equals the net revenue effect.

c. Excise tax numbers are net of income tax offsets.

Federal spending can be divided essentially into two categories. A large part of federal spending is mandated by existing law. The remainder is subject to annual review through the appropriation process.

Direct Spending

The term direct spending refers to four types of spending that are, in effect, mandatory under existing law: permanent appropriations and trust funds; appropriated entitlements; permanent revolving funds; and offsetting receipts. To affect spending in these programs, the basic substantive law usually must be changed. The baseline spending projections for these programs assume that existing law at the close of the last session of the Congress will continue unchanged, and that future spending will respond to assumed economic and population changes in essentially the same way as in the past. Where programs are jointly administered by the federal and state governments (for example, unemployment compensation and AFDC), the projections assume that the states will set eligibility rules and benefit levels in the future in generally the same manner as they have in the past.

Temporary cost-saving provisions enacted in omnibus reconciliation legislation in 1981 and 1982 are assumed to expire as scheduled in law; the major examples of such provisions are listed in Table A-2. The projections do not assume any cost-saving provisions contained in 1983 reconciliation bills but not yet enacted into law.

Permanent Appropriations and Trust Funds. In some instances, authority to spend may be provided directly in the legislation that authorizes a program, without the need for subsequent annual appropriations. Examples of such direct spending programs include Social Security, unemployment insurance, and farm price supports.

Appropriated Entitlements and Other Mandatory Appropriations. Some benefit programs, called appropriated entitlements, have their budget authority provided in annual appropriations. Examples of appropriated entitlements include Medicaid, Supplemental Security Income, Aid to Families with Dependent Children, and the veterans' compensation and pensions programs. The basic legislation for these programs requires the payment of benefits to any person or government meeting the eligibility requirements. The level of annual appropriations is mandated in these cases by existing law and cannot be altered through the appropriation process.

In addition, certain appropriated accounts are treated as mandatory for projections purposes, even though they are not considered as entitlements by both the House and the Senate Budget Committees. The list of mandatory items is that used in the so-called bipartisan baseline, which served as the basis for developing the 1983 budget resolution. The projections for the food stamp program, for example, are computed as if the program were mandatory, since the Congress has always appropriated enough money to cover all benefit payments to eligible recipients. Other programs treated as mandatory include child nutrition, child support enforcement, unemployment trust fund outlays for training and employment and for administrative expenses, payments to air carriers, Maritime Administration operating differential subsidies, rehabilitation services, government payments for annuitants' health benefits, payments in lieu of taxes, and certain miscellaneous trust funds. Federal payments to civil service retirement and other trust funds, while considered mandatory, are exactly offset by corresponding intragovernmental receipts and have no effect on total outlays.

Revolving Loan Funds. The federal government administers many lending programs through revolving funds. Such funds disburse loans and accept repayments of principal and interest. CBO calculates a baseline for such programs by first developing a lending level for each year of the

TABLE A-2. MAJOR TEMPORARY COST-SAVING PROVISIONS

Budget Account (and Subfunction)	Provision	Expiration Date
Medicaid (551)	Reduction in payments to states	Sept. 30, 1984
Medicare (551)	Delay of periodic interim payments	Sept. 30, 1984
	Change in calculating Part B premiums	June 30, 1985
	Increase in funding for audits	Sept. 30, 1985
	Target reimbursement system for hospitals; hospice benefits	Sept. 30, 1986
Military Retirement (051), Civil Service, and Foreign Service Retirement (602)	Limitation on cost-of-living adjustments for retirees under age 62	Sept. 30, 1985
Food Stamps (609)	One-percent reduction in maximum allotment	Sept. 30, 1985
Veterans Administration Housing Loan Programs (704)	Loan processing fee	Sept. 30, 1985

projection. For fiscal years in which the Congress has set a lending limit, CBO uses that limit as a base for projections. If no limit has been set, CBO estimates the base-year lending level to be equal to average program experience over the past few years, adjusted for inflation. For subsequent years in which the Congress has yet to set a ceiling, CBO projects a baseline lending level by inflating the base-year level. Net budget authority and outlays are estimated using these lending levels, projected loan repayments, and established government accounting practices for revolving funds.

Offsetting Receipts. Certain federal government receipts from the public and certain intragovernmental receipts are automatically credited to special receipt accounts and are treated as negative spending. They are deducted from other budget authority and outlays in computing budget totals rather than being counted as revenues. Examples of such receipts include those from the sale of timber in national forests and those from rents and royalties from Outer Continental Shelf (OCS) lands. In the baseline projections, the amount of these receipts is estimated on the assumption that current government policies regarding the extent of timber sales, the scope and timing of offshore leasing activities, and so forth, will be continued, and that actual receipts will respond to underlying economic and demographic conditions, such as the price of lumber and the expected lease value of particular OCS parcels.

Annual Appropriations

The rest of federal spending requires annual action through the appropriation process. The fiscal year 1984 spending level assumed for these programs is that enacted by the Congress through December 1983. The 1985-1989 projections for the appropriated accounts represent a continuation of the policies and program levels embodied in the 1984 appropriation action. Sometimes it is possible to relate these programmatic assumptions to specific Congressional decisions--for example, a production schedule for space shuttles. In these cases, the baseline figures are the projected budget authority and outlays required to achieve the specified program objectives.

For the largest number of appropriated accounts, current spending policy cannot be so clearly defined. Future budget authority for these accounts is generally assumed to stay constant in real terms--that is, to keep pace with a measure of inflation appropriate to the particular budget account. In cases where the 1984 appropriation reflects the deferral of funds from 1983, the 1984 projections base is assumed to be the 1984 program level--that is, 1984 budget authority plus the 1983 deferral.

Although statutory authority for most discretionary programs will expire during the five-year projections period, authorizations are assumed to be routinely renewed except for programs that are clearly of a one-time nature, such as temporary study commissions. The projected growth in budget authority is limited by any authorization limit that may have been set by the Congress; if the limit ceases to apply in some future year, budget authority is assumed to rise with inflation thereafter. If the base-year appropriation exceeds the authorization, the projections also ignore the authorization limit. It is further assumed that budget authority will result in outlays according to the observed historical pattern for the particular account.

DEFENSE PROJECTIONS

This section details the defense baseline and also describes two alternate defense projections.

Defense Baseline

The baseline projections of defense budget authority for 1985 and 1986 are the figures specified in the fiscal year 1984 budget resolution. The 1987-1989 budget authority figures assume an annual increase of 5 percent in real terms. Outlays in each year are CBO estimates of spending resulting from the assumed budget authority.

In calculating real growth for the baseline, the defense budget is broken down into several components, because inflation affects different parts of the defense budget differently. The two major components are employee pay and benefits (about one-third of defense budget authority in 1984) and purchases of goods and services (the remaining two-thirds). The inflation factor used for employee pay and benefits is the assumed rate of pay increase; in the baseline, CBO assumes that federal employee wages are increased at the same rate as those in the private economy. The inflation factors for the other defense budget components are estimates of expected price increases for various goods and services purchased by the Department of Defense; CBO's estimates for these factors are derived by projecting price increases in specific defense industries consistent with the baseline economic assumptions.

Baseline inflation rates for these two major components of defense spending and a composite rate for defense spending as a whole are shown in Table A-3. Because there is often a long lag between the obligation of defense funds and the actual production of the defense goods, different

TABLE A-3. DEFENSE INFLATION RATES UNDER BASELINE ASSUMPTIONS (By fiscal year, in percent)

Component	1985	1986	1987	1988	1989
Budget Authority Inflation Rate					
Pay and Benefits	4.4	5.4	5.5	5.3	5.2
Purchases	8.2	8.0	7.8	8.1	8.4
Composite	7.3	7.4	7.3	7.5	7.8
Outlay Inflation Rate					
Pay and Benefits	4.4	5.4	5.5	5.3	5.2
Purchases	8.1	8.0	7.9	7.9	8.4
Composite	7.2	7.4	7.4	7.4	7.8

inflation rates are computed for budget authority and outlays. For those procurement accounts whose budget authority will result in outlays over many years, the inflation rate for budget authority reflects projected changes in prices over the period during which the budget authority will be spent. The outlay inflation rate, on the other hand, reflects only price changes in the current year.

Defense Projection Adjusting Budget Authority Only for Inflation

As noted in Chapters I and II, other defense baseline assumptions are possible. The primary alternative is to increase defense budget authority just to keep pace with inflation, as is generally assumed in the baseline for nondefense programs. CBO calculates budget authority for this projection by applying the baseline defense inflation rates to the 1984 defense budget authority. Outlays in each year are CBO estimates of spending resulting from the assumed budget authority.

Programmatic Defense Projection

CBO also prepares each year a programmatic defense projection showing the funding necessary to support a specific five-year defense force structure and procurement program that was implicitly approved during the

previous session of the Congress. This programmatic projection permits identification of the multi-year budget costs of specific weapons systems and allows calculation of the budgetary effects of adding or deleting specific systems. The defense force structure and procurement program assumed in this path reflect all specific longer-run plans announced by the Administration through December 1983, adjusted to reflect Congressional action on the fiscal year 1984 authorization and appropriation bills. The programmatic baseline does not, however, assume any real increases in unit-readiness levels, basic research, or classified programs, such as nuclear weapons, intelligence, and communications, because these are not identified in the Administration's five-year defense plans. The programmatic projection is costed in constant dollars and adjusted for price increases using the baseline defense inflation rates described above.

Table A-4 compares the CBO defense baseline, a projection in which defense budget authority is adjusted for inflation only, and a programmatic defense projection. The baseline is characterized by roughly a 5 percent real increase in budget authority, while adjusting budget authority only for inflation results in no real growth. In 1985, the programmatic baseline actually exceeds the 5-percent growth path, reflecting the continuation of procurement programs already begun. Over the 1985-1989 period, however, the programmatic baseline averages less than one percent per year real growth in budget authority.

Procurement Programs. Table A-5 shows the quantities of certain major weapon system acquisitions contained in the programmatic defense projection. The 1984 base figures are quantities approved by the Congress in the appropriations bill, while the 1985-1989 numbers are CBO's extrapolation of Congressional action in 1984. The extrapolations were prepared by adjusting the Administration's 1984 request to reflect 1984 appropriations and authorization action. For example, the Administration sought to procure 48 F-15 aircraft in 1984, 72 in 1985, and 96 per year in 1986-1988; however, the conferees on the Department of Defense Authorization Act of 1984 intended to stabilize F-15 procurement at 36 aircraft per year; the CBO baseline reflects this intent. On the other hand, the Congress reduced the Administration's 1984 request for procurement of the Light Command Post Carrier by 402 units with no indication that it was reducing the total program size; CBO's programmatic projection assumes that the 402 units cut in 1984 were simply deferred and will be procured in later years. Similarly, the Congress denied advanced procurement funding in 1984 for the HH60-D helicopter; CBO assumes that this program is deferred one year.

Force Levels. Table A-6 shows the forces that CBO projects to be deployed through 1989. In general, force levels rise during the five-year

TABLE A-4. ALTERNATIVE DEFENSE SPENDING PROJECTIONS
(By fiscal year, in billions of dollars)

		1984 Base	Projections 1985	1986	1987	1988	1989
Baseline	BA	264	297	329	371	419	474
	O	235	263	295	331	372	419
Adjust Budget Authority for Inflation Only	BA	264	283	304	326	351	378
	O	235	259	282	305	329	354
Programmatic Projection	BA	264	299	319	343	375	392
	O	235	264	292	317	344	370

period because deliveries from past procurement budgets exceed force retirements resulting from obsolescence and other reasons. The number of deployed frigates, for example, rises from 95 in 1984 to 106 in 1989 mainly because of the many frigates ordered in 1983 and prior years. In strategic offensive forces, Titan and Minuteman force levels are reduced, but deployed MX-missiles begins with 20 in 1986, rising to 100 in 1989. In strategic defensive forces, the F-15 replaces the F-106 as the strategic interceptor.

Readiness Programs. In projecting the budget accounts normally associated with force readiness (for example, military personnel and operations and maintenance), CBO's programmatic projection assumes that the 1984 appropriations achieved a satisfactory level of readiness funding. The relevant budget accounts are assumed to rise in real terms to support the increase in deployed force levels. Table A-7 shows the number of military and civilian personnel necessary to maintain the 1984 readiness level.

Other Programs. The programmatic projections hold some DoD programs constant in real terms either because they are relatively minor programs of a routine nature (for example, small military construction projects or because details are classified--intelligence and communications programs). For similar reasons, defense programs of the Department of Energy, the General Services Administration, the Selective Service System, and the Intelligence Oversight Staff are held constant in real terms.

TABLE A-5. MAJOR PROCUREMENT PROGRAMS CONTAINED IN THE PROGRAMMATIC DEFENSE PROJECTION (By fiscal year, in units of equipment)

	1984 Base	Projections				
		1985	1986	1987	1988	1989
Strategic Weapons						
MX	21	37	48	48	48	21
Trident I missile	52	--	--	--	--	--
Trident II missile	--	--	--	27	72	72
Trident submarine	1	1	1	1	1	1
B-52 modifications	27	28	--	--	--	--
Cruise missiles a/	364	120	353	428	458	498
B-1	10	34	48	--	--	--
KC-135 reengining	24	65	65	72	72	72
Tactical/Mobility Forces						
Land Forces						
AH64	112	144	144	56	--	--
Patriot missile	440	815	815	816	830	891
M1-tank	840	840	720	720	720	720
Bradley fighting vehicle	600	830	1,080	1,080	1,080	512
Divad gun	130	132	144	66	--	--
Air Force Tac Air						
F-15	36	36	36	36	36	36
F-16	144	150	180	180	180	180
KC-10A	8	8	12	8	12	--
E-3A (AWACS)	--	3	3	3	3	--
Navy/Marine Corps Tac Air						
CVN	--	--	--	--	1	--
CVN-SLEP	--	1	--	1	--	1
F-14	24	24	30	30	30	30
F-18	17	45	51	55	63	71
AV-8B	27	48	60	60	60	35
Naval Forces						
SSN-688	3	4	4	5	5	5
CG-47	3	3	3	3	2	2
FFG-7	1	--	--	--	--	--
DDG-51	--	1	--	3	5	5
Mobility Forces						
C-5B	4	10	16	19	--	--

a. Air Force ALCM and Navy Tomahawk.

TABLE A-6. MAJOR ACTIVE FORCE LEVELS USED IN THE PROGRAMMATIC DEFENSE PROJECTION
(By fiscal year, in units of equipment)

	1984 Base	Projections				
		1985	1986	1987	1988	1989
Strategic Forces						
Offensive						
Titan	34	26	11	--	--	--
Minuteman	1,000	1,000	990	950	900	900
SSBN	35	36	37	39	39	40
B-52	241	241	241	241	241	241
FB-111	56	56	56	56	56	56
B-1B	--	1	17	59	90	90
MX	--	--	--	20	55	100
Defensive						
F-106	54	36	18	--	--	--
F-15	36	54	90	90	90	90
Tactical/Mobility Forces						
Land Forces						
Army divisions	16	16	16	16	16	16
Marine Corps divisions	3	3	3	3	3	3
Air Force Tac Air						
A-10	300	300	300	300	300	300
F-4	468	405	343	303	274	173
F-15	408	421	423	481	566	635
F-16	432	506	590	644	692	764
F-111	204	204	204	204	204	204
E-3A	28	28	28	28	28	28
Navy Tac Air						
Aircraft carriers	13	13	13	14	14	14
A-6/KA-6	182	182	182	196	196	196
F-14	264	264	264	288	288	288
A/F-18	46	84	120	144	192	240
A-7	264	248	212	212	164	116
Marine Corps Tac Air						
AV-8	53	69	89	105	125	150
F-18	36	60	84	120	144	144
A-6/KA-6	65	65	65	65	65	65
A-4	76	52	32	16	--	--
F-4	108	84	60	24	--	--
Naval Forces						
Attack submarines	94	96	98	98	98	96
Destroyers	68	68	68	68	68	69
Frigates	95	101	104	106	106	106
Cruisers	29	30	32	35	37	40
Battleships	1	2	2	3	4	4
Mobility Forces						
C-130	218	218	218	218	218	218
C-5A/B	70	72	78	84	95	95
C-141	234	234	234	234	234	234

TABLE A-7. ACTIVE MILITARY AND CIVILIAN PERSONNEL IN THE PROGRAMMATIC DEFENSE PROJECTION
(By fiscal year, end-strength in thousands)

Type of Personnel	1984 Base	Projections				
		1985	1986	1987	1988	1989
Active Officers	300.2	304.7	306.7	314.1	319.7	322.8
Active Enlisted	1,835.6	1,865.3	1,876.4	1,925.4	1,957.2	1,982.6
Civilians	1,056.2	1,081.8	1,084.5	1,099.9	1,107.6	1,116.2

SPECIAL ASSUMPTIONS FOR NONDEFENSE SPENDING

Most other spending is projected using the baseline concepts and approaches detailed in the second section of this appendix. This section provides further information for those nondefense budget accounts requiring specialized assumptions or methodology. Accounts projected using the standard techniques are not discussed.

International Affairs (Function 150)

This function consists primarily of discretionary spending for economic and security assistance, administration of foreign affairs, international broadcast and cultural exchange activities, and export promotion. It also includes the foreign military sales trust fund, the special defense acquisition fund (a revolving fund), and various offsetting receipts. Two accounts--the Export-Import Bank and the Exchange Stabilization Fund--are sensitive to interest rates. The projections incorporate special assumptions in the following areas.

Contributions to Multilateral Development Banks. Periodically, the United States and other donor countries enter into agreements providing additional resources for the multilateral development banks. The replenishment agreement, as it is called, may extend over a number of years, with annual appropriations as partial payments. Once signed, the agreement is treated as binding. If one year's appropriation is less than the scheduled contribution, the difference is included in subsequent budget requests until the full amount is provided.

Arrearages, or the difference between the requested amount and the amount provided in the continuing resolution (P.L. 98-151), are assumed to be provided in fiscal year 1985. The projections assume that future replenishments of paid-in capital and contributions to the concessional lending windows of the regional banks will be negotiated with the same terms and conditions as are in the current replenishments, but with no real growth in funding levels. The projections assume that a new replenishment for the International Development Association will be negotiated for fiscal year 1985, and that a replenishment for the African Development Fund will begin in fiscal year 1986.

Public Law 480 Foreign Assistance Program. The Public Law 480 food assistance program is projected using the obligation levels contained in appropriation acts as the base. Budget authority equals the new appropriations required to finance the program, and outlays equal gross disbursements less receipts credited to the account.

International Monetary Fund. The United States has been a member of the International Monetary Fund (IMF) since the Bretton Woods Agreement in 1944 and has participated in every increase in IMF resources since then. Quota subscriptions have been raised roughly every five years, the most recent increase being in fiscal year 1984. The baseline assumes another increase in fiscal year 1988 equal to an amount sufficient to maintain the real level of the current U.S. quota subscription. No increase in the General Arrangement to Borrow is projected. Dollar transfers with the IMF are treated by the Treasury as an exchange of international reserve assets and are not counted as net budget outlays, although they do affect the Treasury's cash position and borrowing requirements.

Guarantee Reserve Fund. In fiscal year 1981, the Congress ceased appropriating reserves for guaranteed foreign military sales credits. Funds appropriated as reserves in earlier years for guaranteed loans were consolidated in a revolving fund to make payments on rescheduled loans and defaults. Since fiscal year 1980, net outlays for the fund have exceeded $100 million per year. It is estimated that the reserves will be exhausted in fiscal year 1987; the projections assume appropriations for reserves will begin in that year.

Agency for International Development. Estimated subrogated claims and losses for the housing investment guarantee program in the Agency for International Development exceed its reserves. The projections assume appropriations for reserves beginning in fiscal year 1985.

Special Defense Acquisition Fund. Net outlays are estimated by projecting the limits on new obligations contained in appropriation acts.

The fund has no budget authority, but it draws upon its unobligated balance. It is capitalized with receipts from the foreign military sales program. The size of the fund is limited by authorizing legislation to $900 million. It is estimated to reach its statutory limit in fiscal year 1984, and no new capitalization is assumed.

Export-Import Bank. While Export-Import Bank loans are limited in appropriation acts, the level of new loan commitments depends significantly on market forces. The worldwide recession, heavy debt burdens in developing countries, high exchange rates for dollars, and an international agreement limiting export subsidies have kept actual loan commitments below the program limit for the past two years. With a depreciating dollar and world recovery projected, the level of Eximbank loan commitments is estimated to grow, but to remain below the projected program limits through fiscal year 1985. Budget authority measures potential borrowing requirements from bank activity. It equals direct loan obligations less direct credit repayments, direct credit cancellations, and bank net income, plus redemption of debt and any change in the balance of unobligated borrowing authority available to the bank. Outlays are a measure of bank net borrowing, or gross disbursements less direct loan principal repayments and net income.

General Science, Space, and Technology (Function 250)

CBO's baseline projection for the National Aeronautics and Space Administration assumes funding for construction of four shuttles and funding at current levels for all other activities. CBO bases its projections on the estimated amounts needed to complete construction of the final shuttle. Because construction is nearly complete, less funds will be required in the future. All other programs in this function are projected by adjusting budget authority for inflation.

Energy (Function 270)

This function consists largely of discretionary spending. It also includes two major permanent appropriations (Tennessee Valley Authority and Bonneville Power Administration) and offsetting receipts from the sale of mineral products and electric power.

Tennessee Valley Authority and Bonneville Power Administration. These two accounts are funded by permanent indefinite borrowing authority subject to a cap. The baseline projection of budget authority for these accounts is an estimate of the borrowing authority required to finance their

capital investments. The outlay projections are CBO's best estimate of capital spending net of receipts. All operating expenses are assumed to be covered by revenues from ratepayers.

Uranium Enrichment. The baseline projection of budget authority is the difference between revenues and operating expenses for uranium enrichment, as estimated by CBO. The revenue estimates are based on projected sales and unit price for enriched uranium. The operating expenses are projected from the 1984 base and assume a constant level of production and other activities.

Sale of Mineral and Mineral Products. This is an offsetting receipts account, to which are credited the receipts from the sale of oil and other petroleum products from the Naval Petroleum Reserves. The estimate of receipts is based on the estimated price of oil, the rate of production from the reserves, and an estimate of receipts generated from the sale of other petroleum products. It does not include the estimated revenues from the windfall profits tax, which appear on the revenue side of the budget.

Nuclear Waste Fee. The account for nuclear waste fees represents CBO's estimate of receipts collected from a fee on nuclear-generated electricity. This fee was imposed by the Nuclear Waste Policy Act of 1982 at 0.1 cents per kilowatt hour. CBO bases its estimate on the status of plants under construction and their projected operation date. The estimate assumes that the fee remains constant through 1989.

Strategic Petroleum Reserve. Congress has created two accounts for the Strategic Petroleum Reserve: one on-budget, which funds operation and construction of the reserve, and the other off-budget, which funds oil acquisition. The baseline estimate for operation and construction reflects the 1984 appropriation adjusted annually for inflation.

The off-budget baseline projection assumes acquiring oil at 186,000 barrels per day through 1985 as recommended in the Energy and Water Appropriations Act of 1984, and at a rate so as to not exceed permanent capacity for 1986-1989. CBO estimates that 684 million barrels of oil will be in the reserve by the end of 1989, based on these assumptions.

Natural Resources and Environment (Function 300)

Spending in this function consists largely of discretionary programs for the development and management of water resources, for conservation and land management, for the development of recreational resources, and for pollution control and abatement. The function also includes substantial offsetting receipts from the sale of timber, minerals, recreation permits, and the like.

Agriculture (Function 350)

This function includes one major entitlement program--the price support activities of the Commodity Credit Corporation (CCC). The remainder of the function consists largely of discretionary spending.

Agricultural Credit Insurance Fund. The Agricultural Credit Insurance Fund is a revolving fund that makes loans to farmers and sells the resulting loan assets to the Federal Financing Bank (FFB). Budget authority for a given year consists of permanent indefinite borrowing authority to cover the current year's cash flow needs. Outlays equal any loss plus appropriations to reimburse net realized losses of two years ago.

Through 1984, the volume of farm operating and ownership loans is set at the dollar levels specified in the 1984 Agriculture Appropriations Act; it is held constant in real terms thereafter. Program levels for Indian tribe, soil and water, and irrigation and grazing loans are inflated from the 1984 base. Disaster loans in 1985-1989 are projected to equal the average volume in 1978-1983, adjusted for inflation.

All loans are assumed to be disbursed in the year of their commitment. Loan asset sales to the FFB are assumed to equal loan commitments, but 15 percent of the sales are assumed to occur in the following fiscal year.

Federal Crop Insurance Corporation. Budget authority for the Federal Crop Insurance Corporation (FCIC) fund is projected to be the amount of appropriations necessary to cover a 30 percent premium subsidy, plus the difference between premiums for hail and fire coverage and indemnities for these losses. Participation in the program is assumed to increase 5 percent a year from the base-year level. Premium income is assumed to be $7 for every $100 of liability, and indemnities are assumed to be 90 percent of premiums. Budget authority for FCIC administration and operations is projected as a percentage of premiums (43 percent in 1984, declining by 3 percent each year thereafter).

Commodity Credit Corporation Price Support Programs. The baseline outlay estimates of Commodity Credit Corporation price support activities are a best estimate of likely expenditures, based on the terms and conditions established in the Agriculture and Food Act of 1981 (Public Law 97-98), the Reconciliation Act of 1982, the Dairy and Tobacco Adjustment Act of 1983, and expected Administration actions in implementing the legislation. The projections assume that the Administration will implement reduced acreage programs requiring retirement of 30 percent of wheat acreage for the 1985 through 1988 crops, 10 percent of feed grain acreage for the 1985 through 1988 crops, and 30 percent of cotton acreage for the 1985 to 1989 crops.

Target prices are assumed to be equal to the minimum levels established by the farm act. The 1986, 1987, and 1988 crop year target prices are at levels representing increases equal to those implicit in the 1984 to 1985 crop year statutory minimums. Loan rates are assumed to be maintained at the announced 1984 levels through the 1988 crop year. The farmer-owned reserve entry rate is assumed to be held constant at announced 1984 levels. No payment-in-kind supply reduction program is assumed for crop years after 1984.

The assessment per hundredweight of marketed milk authorized in the 1982 Reconciliation Act is assumed to rise to $1.00 and remain at that level until fiscal year 1988, when it is assumed to be reduced to 50 cents. CBO assumes that 60 percent of dairy producers will participate in the paid diversion program required in the 1983 Dairy and Tobacco Adjustment Act. The projections assume that these producers will reduce milk production by 12.2 billion pounds through March 31, 1985, and that nonparticipants will increase their production by 2.2 billion pounds during the same period. Dairy support prices are assumed to be reduced by 50 cents per hundredweight of milk on April 1, 1985, and again on July 1, 1985, and to remain at $11.60 per hundredweight thereafter.

CCC budget authority estimates are based on estimated realized losses from the current year's activity and any additional borrowing authority necessary to meet net obligations.

Commerce and Housing Credit (Function 370)

In addition to funds for housing credit and thrift deposit insurance, this function includes funding for the Small Business Administration's loan programs and the Postal Service subsidy, and for parts of the Department of Commerce. The function contains several major revolving funds: the Department of Agriculture's rural housing insurance fund (RHIF); the Department of Housing and Urban Development's housing for the elderly and handicapped program and special assistance functions fund; and the Federal Savings and Loan Insurance Corporation (FSLIC) and Federal Deposit Insurance Corporation (FDIC) funds. Except for the FSLIC and FDIC funds and some other smaller permanent appropriations, spending in this function is discretionary.

Rural Housing Insurance Fund. In addition to its direct loan program, the RHIF also includes the rural rental assistance program. The baseline assumes that budget authority for this program will be sufficient to assist the same number of additional units per year as is implicit in the base-year appropriation.

Federal Housing Administration Fund. The Federal Housing Administration insures certain private mortgage loans. Budget authority is required when insurance claims exceed income in a given year. The current policy baseline for this account, therefore, is derived from estimates of insurance claims and fund income in each year, assuming continuation of the program in its current form.

Payment to the Postal Service. The payment to the United States Postal Service (USPS) has historically included three components, each of which is projected separately. (1) Unfunded liabilities include liabilities for unfunded annual leave and workers' compensation that had accrued to the Post Office Department before it was reorganized in 1970. The unfunded annual leave was fixed at $31 million annually through 1983, $14.4 million in 1984, and zero thereafter. For projections purposes, the workers' compensation liability is held constant in real terms. Consistent with the 1981 Reconciliation Act, the payment for unfunded liabilities for the years 1982-1984 has been deferred until 1985; beyond 1985, the normal payment level is assumed. (2) The baseline projection no longer includes an allowance for public service costs, because no funding has been appropriated for 1984, and the 1981 Reconciliation Act did not authorize the subsidy beyond 1984. (3) The payment for revenue forgone is the compensation for revenues lost when the Congress has specified reduced postage rates for certain classes of mailers. For 1984, the Congress appropriated $879 million (which exceeds the level specified in the 1981 Reconciliation Act by $119 million). For subsequent years, the 1984 appropriation is adjusted for inflation.

Periodic Censuses and Programs. The baseline is irregular because of the cyclical nature of the activities conducted by the Bureau of the Census. An adjustment is made to exclude one-time items (generally major capital expenditures) and to include future censuses required by law. The various major components are then adjusted for inflation after the base year.

Transportation (Function 400)

This function consists primarily of discretionary programs for highway, railroad, mass transit, air, and water transportation. It also includes two entitlements--Coast Guard retired pay and settlements of railroad litigation--and receipts from the Panama Canal.

Federal-Aid Highways. Budget authority for the interstate highway program and the emergency relief program is projected to remain constant ($4 billion and $100 million, respectively) through the projection period, as specified in the Surface Transportation Assistance Act of 1982 (P.L. 97-424). Budget authority for noninterstate highway programs is

provided through 1986 by P.L. 97-424 and is held constant in real terms thereafter. In 1984, appropriations action limited obligations to $12.5 billion. The projections assume that obligations are held at the ceilings established by P.L. 97-424 in 1985 and 1986 and are inflated thereafter by a price index for construction costs.

Washington Metropolitan Area Transit Authority. The annual interest payments for the Washington Metropolitan Area Transit Authority (WMATA) are projected to remain constant through 1989 at $51.7 million. This represents the federal government's two-thirds share of interest payments due on WMATA's outstanding debt issue.

Northeast Corridor. At the beginning of fiscal year 1984, $310 million in unappropriated authorizations remained available for the Northeast Corridor Improvement Project, and the appropriation for 1984 is $100 million. CBO inflates the 1984 appropriation by a price index for railroad equipment to derive the 1985 and 1986 baseline budget authority, with the remainder of the current authorization assigned to 1987.

Grants-in-Aid for Airports. Budget authority for fiscal years 1984 through 1987 is established for this program in the Airport and Airway Improvement Act of 1982 (P.L. 97-248) and the Surface Transportation Assitance Act of 1982 (P.L. 97-424). For fiscal years 1988 and 1989, 1987 budget authority is adjusted for inflation. Estimates of outlays are based on obligation ceilings; the enacted 1984 obligation ceiling of $800 million is held constant in real terms.

Operating Differential Subsidy. The Maritime Administration's operating differential subsidy program is designed to offset the higher costs of operating U.S. flag vessels in foreign trade. The projection of budget authority represents the estimate of the federal government's liability under the contracts in force for the projection period, which depends on an assumed ship mix, trade routes, products carried, and number of ship-years.

Mass Transportation Capital Fund. The Surface Transportation Assistance Act of 1982 (P.L. 97-424) set aside one cent of the gasoline and diesel fuel excise tax for mass transportation purposes. The projections assume the budget authority established by this law through 1986 and hold budget authority constant in real terms thereafter. Outlay projections are based on the obligation ceiling; the enacted 1984 ceiling is $1.2 billion; in future years the ceiling is assumed to be equal to budget authority.

Highway Safety Grants. Budget authority for state and community highway safety grants is established by law through 1986 and is projected to be held constant in real terms thereafter. To project outlays, it is assumed

that the obligation ceiling will equal budget authority, consistent with Congressional action in 1984.

Community and Regional Development (Function 450)

This function contains discretionary programs to aid urban and rural areas, stimulate economic growth in underdeveloped regions, and aid Indian tribes, as well as some small permanent appropriations and offsetting receipts.

Disaster Assistance. Three major programs in the function help mitigate the effects of natural disasters on individuals, local governments, and businesses. Through these programs, the federal government provides flood insurance, loans to help restore damaged property, and grants to victims. Because of the unpredictability of demand for these programs, baseline projections are based on weighted historical averages, adjusted for inflation and changes in administrative regulations. (The Congress has repeatedly demonstrated its willingness to provide needed emergency funds in supplemental appropriations bills.) For disaster relief grants and disaster loans, program levels are based on the experience of the past ten years. For flood insurance, the average is based on the net activity of the program since 1978, when the government terminated the shared-risk approach to underwriting flood insurance. All program levels are adjusted for legislative and administrative changes as they are implemented.

The baseline for fiscal year 1984 and beyond for the Small Business Administration disaster loan program assumes that SBA will be required to provide direct loans to farm business disaster victims, should any apply. Pending final action on the 1983 reconciliation bill, which would extend the law that excludes farmers from the SBA programs, the CBO baseline includes an estimate of additional SBA direct loans to farm disaster victims.

Education, Training, Employment, and Social Services (Function 500)

This function contains a wide variety of education, manpower, and social services programs that are primarily discretionary in nature. It also includes three major entitlement or mandatory programs: guaranteed student loans, social services grants under Title XX of the Social Security Act, and grants to states for vocational rehabilitation. Outlays for guaranteed student loans depend on the Treasury bill rate.

Corporation for Public Broadcasting. The Corporation for Public Broadcasting is advance funded; the fiscal year 1984 appropriations act

provides funds for 1986. The baseline in 1984-1986 reflects the amount appropriated for those years. After 1986, the baseline is derived by inflating the 1986 appropriation by estimated price changes.

Job Training Partnership Act. The Job Training Partnership Act authorizes forward funding beginning in 1984. The 1984 budget authority level reflects the one-time transition to forward funding. This transitional funding also occurs in the employment service authorized under the Wagner-Peyser Act.

Health (Function 550)

The health function includes a major entitlement program (Medicaid), a large mandatory appropriation (federal payments for annuitants' health benefits), and a variety of discretionary health research, services, training, and regulation activities.

Medical Insurance (Function 570)

This function comprises the budgetary accounts relating to Medicare--hospital insurance, supplementary medical insurance, Medicare premiums (an offsetting receipt), and various intragovernmental transactions--as in the fiscal year 1984 budget resolution. The Administration's 1985 budget also includes Social Security cash benefits in this function.

Hospital Insurance. The baseline projections for the Hospital Insurance component of Medicare are particularly uncertain after 1985 because of uncertainties concerning future hospital reimbursements. The Social Security Amendments of 1983 instituted a prospective reimbursement system for inpatient hospital services. Under this system, patients are classified into 468 diagnostic-related groups (DRG). After a three-year phase-in period, hospitals will be paid a fixed amount per DRG. For 1984 and 1985, the Social Security Amendments gave explicit guidance concerning the setting of the DRG rates. After 1985, the DRG rates are to be set by the Secretary of Health and Human Services, advised by an independent commission.

The baseline projections assume that Hospital Insurance expenditures, adjusted for increased admissions, will grow about 2.5 percent above the growth in the prices of hospital inputs in 1986 and beyond. This assumed growth rate incorporates not only future increases in DRG rates, but also increases in hospital expenditures not explicitly limited by the prospective payment system. The baseline assumes that the new prospective payment

system will moderate the Hospital Insurance growth rate, adjusted for admissions and input prices, by about one percent compared to recent experience.

Income Security (Function 600)

The income security function includes both cash and in-kind benefit programs. Most of these programs are entitlements that are automatically indexed for inflation--for example, federal employee retirement, unemployment compensation, food stamps, and supplemental security income.

Subsidized Housing Programs. Funds appropriated annually for this account provide assistance to low-income households through various rent subsidy programs administered by the Department of Housing and Urban Development (HUD). The distribution of assistance among the various subsidy programs is derived from spending set-asides included in appropriations and authorizations bills and information furnished by HUD. From this distribution, CBO estimates the number of additional units for which assistance contracts can be executed within the base-year appropriation. The baseline projection is an estimate of the funding that would be required to maintain this level of newly assisted units in each of the following five years.

Public Housing Operating Subsidies. Each year the Congress provides appropriations to subsidize the operating expenses of public housing projects. The baseline projections represent estimates of the funds required in each year to maintain the real level of assistance for each housing unit that is implicit in the base-year funding level. The year-to-year projections will grow, therefore, because of increases both in costs and in the number of units eligible for assistance. The estimated annual change in units assisted is consistent with program mix assumptions used for the subsidized housing programs.

Refugee and Entrant Assistance. The projections for cash and medical assistance to refugees are based on the number of refugees recently entering the United States. These costs are projected to decrease because of a decline in the number of refugees entering the country. The other programs of refugee assistance are held constant in real terms.

Social Security (Function 650)

This function comprises the budgetary accounts relating to Social Security cash benefits--old-age and survivors insurance, disability

insurance, and various intragovernmental transactions--as in the fiscal year 1984 budget resolution. The Administration places Social Security cash benefits in function 570.

Veterans' Benefits and Services (Function 700)

Veterans' benefits and services consist of those federal programs designed for veterans, their dependents, and their survivors. About two-thirds of the spending of this function consists of entitlements and other mandatory programs providing income assistance, education benefits, and housing loans. The remaining one-third consists of discretionary spending, largely for medical care.

Veterans' Compensation. The veterans' and survivors' compensation program is not indexed for inflation by law, but the benefit levels have historically been adjusted through annual legislation to cover increases in the cost of living. Prior to 1983 cost-of-living adjustments were usually effective on October 1 and equal to the percentage increase in Social Security and veterans' pensions. Both the House and the Senate have passed bills, however, delaying the October 1983 increase until April 1984. Because of this pending legislation and the assumptions of the fiscal year 1984 budget resolution, the baseline assumes that veterans' compensation benefits will receive cost-of-living adjustments effective April 1, 1984, and December 1 of each subsequent year.

Veterans' Readjustment Benefits. This program is not indexed for inflation by law and receives legislated increases in benefit levels only sporadically. Since the timing and amount of future legislated increases cannot be predicted with any degree of confidence, the baseline for this account assumes no change in the current benefit rates.

Loan Guaranty Revolving Fund. This entitlement program guarantees loans made by private lenders to veterans who meet the financial qualifications. The baseline spending levels for the fund reflect the default costs resulting from the foreclosures of guaranteed loans. CBO projects that the fund will have a deficit in each year except 1986. The baseline assumes that appropriations or borrowing from the Treasury will be authorized to finance these deficits and shows the deficit amounts as budget authority of the fund.

Administration of Justice (Function 750)

This function includes the costs of law enforcement, prosecution, the federal courts, prisons, and criminal justice assistance to state and local governments. It consists almost entirely of discretionary appropriations.

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General Government (Function 800)

This function includes the activities of the Legislative Branch, the White House and the Executive Office of the President, and the agencies responsible for personnel management, fiscal operations, and property control. The only major entitlement is for payment of certain claims against the United States.

Official Mail Costs. Congressional postage fees are paid out of this account. CBO's projection of mail costs is based on estimated usage and reflects historical patterns.

Federal Buildings Fund. This revolving fund finances the real property operations of the government. Space and services are provided to agencies by the General Services Administration (GSA), which is reimbursed by the agencies. Obligations and disbursements from the fund are subject to limitations on the availability of revenue imposed through the appropriations process. CBO's estimate of outlays is based on the sum of estimated outlays for property management and estimated receipts from the collection of standard-level user charges from agencies.

The continuing appropriations resolution for fiscal year 1984 limited the extent to which GSA may increase user charges during 1984. The baseline projections assume that the limitation will not be reimposed and that user charges in 1985 and thereafter will be set at estimated market levels.

General Purpose Fiscal Assistance (Function 850)

The payments in this function provide undesignated, general financial assistance to state and local governments and U.S. territories, including payments provided through general revenue sharing and loans and payments to the District of Columbia. Most spending in this function is mandatory.

Forest Service and Bureau of Land Management Miscellaneous Permanent Appropriations. Certain percentages of the federal government's receipts from leasing rights and logging on federal land are paid to local units of government. CBO projections for these permanent appropriations are therefore based on estimated timber and mineral receipts, which are recorded in function 300.

Payments in Lieu of Taxes. This program provides for payments to local governments that have certain federally owned land within their boundaries. Payments to local jurisdictions are based primarily on the

acreage of such land and on the population of the jurisdiction. Estimated budget authority and outlays for this program are held constant over time because CBO assumes no significant change in the total acreage in the program and in the population of the jurisdictions involved.

Net Interest (Function 900)

The net interest function is the sum of three components: interest on the public debt, interest received by certain trust funds, and other interest. All of the second component and most of the third are composed of offsetting receipts.

Interest on the Public Debt. Interest on the public debt is calculated based on projections of interest rates and the value of outstanding debt securities. The growth each year in total debt is the sum of borrowing from the public and new debt issued to federal government trust funds.

Borrowing from the public in each fiscal year is the total of the unified and off-budget deficits, less reductions in cash balances and other means of financing those deficits. The Treasury borrows throughout each fiscal year in accordance with fairly predictable seasonal patterns by issuing various debt instruments (primarily bills, notes, and bonds sold at auction). In addition, the stock of existing debt is rolled over on scheduled dates at rates equal to rates on new borrowing.

The public debt also includes debt issued to federal trust funds and certain other funds (for example, escrow accounts for bids on disputed tracts on the Outer Continental Shelf). Net new purchases of securities by these funds are estimated consistent with baseline projections of fund income and outgo. Most of these interest costs are offset in the next subfunction.

Interest Received by Certain Trust Funds. A portion of interest on the public debt is paid by the Treasury to government trust funds, which invest in U.S. government securities. The interest received by those trust funds is recorded as an intragovernmental receipt.

Other Interest. This subfunction includes interest payments on tax refunds and, as offsets, various interest collections from federal agencies and the public. The projection of interest on tax refunds is based on projected baseline tax revenues and interest rates. Interest receipts from off-budget agencies (primarily the Federal Financing Bank) are projected using lending and repayment assumptions consistent with baseline projections of off-budget spending. Interest earnings on tax and loan account

balances are estimated using assumptions of average balances and CBO forecasts of short-term interest rates. Treasury interest receipts from other on-budget federal agencies are set equal to the corresponding interest outlays implicit in projections of other budget accounts.

Allowances (Function 920)

The base-year (fiscal year 1984) figures for this function represent the estimated budget authority and outlays to be provided to civilian agencies in a supplemental appropriation covering the cost of the January 1984 pay raise (3.5 percent for white- and blue-collar employees and 4.0 percent for uniformed employees of civilian agencies). The estimate assumes that civilian agencies will be required to absorb $150 million, or 17 percent, of the cost of the pay raise out of previously appropriated funds, as was assumed in the fiscal year 1984 budget resolution.

The effects of the January 1984 pay raise during the projections period (fiscal years 1985-1989) are shown in the appropriate salary and expense accounts in the other functions of the budget. The baseline projections assume that budget authority will be increased to pay for the full cost of the January 1984 pay raise. No absorption is assumed in the outyears.

The 1985-1989 baseline projection for this function contains all budget authority and outlay growth resulting from anticipated pay rate increases for employees of civilian agencies. The projections assume that all federal civilian workers, including those now at the pay ceiling, will receive pay rate adjustments equal to the annual rate of increase in private-sector pay and that this increase will occur in October, as under current law. These increases are projected to be 3.3 percent in October 1984, 5.4 percent in 1985, 5.6 percent in 1986, 5.5 percent in 1987, and 5.5 percent in 1988. No absorption of the cost of these pay adjustments is assumed, since any action regarding absorption represents a policy decision that is separate from decisions about federal pay rates.

The methodology for estimating pay costs is described in a CBO paper, The Budgetary Treatment of Federal Civilian Agency Pay Raises: A Technical Analysis.

Undistributed Offsetting Receipts (Function 950)

Certain offsetting receipts are classified as undistributed offsetting receipts rather than being included in any of the other functions.

Employer's Share, Employee Retirement. The government's contribution to federal employee retirement plans is assumed to grow in proportion to assumed pay rate increases and scheduled increases in contribution rates. This includes federal agencies' share of the Social Security tax, for which new federal workers and their employing agencies became liable on January 1, 1984.

Outer Continental Shelf Receipts. Outer Continental Shelf (OCS) receipts consist of cash bonus bids from lease sales, annual rental payments, royalties on oil and gas revenue, and payments to the federal government resulting from the release of disputed OCS receipts from escrow accounts. Bonus receipts for 1984 and 1985 are estimated on a sale-by-sale basis, reflecting bonus bids on previous offerings in the area in which a sale will occur, and the Minerals Management Service (MMS) estimate of oil and gas reserves in the sale area. Bonus receipts for subsequent years are assumed to remain at the 1985 level. Escrow releases are dependent upon resolution of various court cases; timing of those releases is estimated based on information from the Department of the Interior's Solicitor's Office. Royalty receipt estimates are based on MMS projections of oil production and CBO projections of gas production and oil and gas prices.

APPENDIX B. BASELINE SPENDING AND CREDIT PROJECTIONS BY FUNCTION AND MAJOR PROGRAM CATEGORY

The outlay categories used in the body of this report are designed to reflect the way in which the Congress has approached spending decisions in recent budget resolutions. This appendix provides a classification of federal spending and credit in terms of two further analytical structures: budget function and major program category.

One important classification of federal spending is by the major functions being served by federal programs. The Congressional Budget Act of 1974 requires the Congress to include estimates of budget authority and outlays for each major function in its annual budget resolutions. The functional classification is a means of presenting spending estimates according to the national needs that federal programs are intended to serve, regardless of the methods used to carry out the activities. National needs are grouped in 18 broad areas, ranging from national defense, international affairs, and energy programs to agriculture, transportation, health, and general government programs. Three additional categories--net interest, allowances, and undistributed offsetting receipts--do not address specific national needs but are included to cover the entire budget.

This year the Office of Management and Budget has made two major changes in the functional classification. The present report reflects these two changes:

- After 1984, as provided by the Department of Defense Authorization Act for 1984 (P.L. 98-94), the national defense function (function 050) no longer includes actual cash outlays for military retirement benefits but instead contains payments to the new military retirement trust fund for the additional accrued retirement costs for military personnel currently on active duty. Since these payments are intragovernmental, they are offset by an equal amount in employer share, employee retirement (subfunction 951). Military retirement cash benefits will henceforth be included in income security (function 600).

- Several receipts accounts that collect interest from trust funds have been reclassified from net interest (function 900) to the function of the paying account. The most significant examples involve interest paid by the hospital insurance, old-age and sur-

vivors insurance, and disability insurance trust funds to the Treasury, now included in the Medicare and Social Security functions (functions 570 and 650).

In contrast to the fiscal year 1984 budget resolution, the Administration includes both Medicare and Social Security cash benefits in a single budgetary function, as it believes is required by the Social Security Amendments of 1983.

The second way of categorizing federal spending is by major program category. This approach focuses more on the method of carrying out an activity than does the functional classification. The major program categories are national defense, benefit payments to individuals, grants to state and local governments (other than for benefit payments), net interest, and other federal operations. The national defense and net interest categories are identical to the budget functions of the same name.

The benefit payments category includes both direct payments from the federal government to individuals (such as Social Security benefits) and indirect payments through state and local governments (such as Medicaid and public assistance). The bulk of benefit payments for individuals are classified in the health, medical insurance, income security, social security, and veterans' benefits and services functions (functions 550, 570, 600, 650, and 700).

Grants to state and local governments (other than for benefit payments) include grants for the construction of wastewater treatment plants, grants for highway construction, community development grants, aid for elementary and secondary education, employment and training assistance, and general revenue sharing. Grants are fund in functions 300, 400, 450, 500, and 850.

The other federal operations category includes the remainder of the budget. The major spending components are foreign aid, general science research and space technology, domestic energy programs, farm price supports, housing credit activities, and other day-to-day operations of the federal government. It also includes as offsets most of the receipts discussed in Chapter II.

Tables B-1, B-2, and B-3 present the baseline projections of budget authority, outlays, and credit by function. Table B-4 shows the distribution of baseline outlays by major program category.

TABLE B-1. BASELINE BUDGET AUTHORITY PROJECTIONS BY FUNCTION (By fiscal year, in billions of dollars)

	1984 Base	Projections				
		1985	1986	1987	1988	1989
National Defense (050)	264	297	329	371	419	474
International Affairs (150)	20	15	16	17	22	18
General Science, Space, and Technology (250)	9	9	9	9	10	10
Energy (270)	4	4	5	5	5	6
Natural Resources and Environment (300)	12	12	13	13	13	14
Agriculture (350)	13	16	19	20	21	21
Commerce and Housing Credit (370)	6	6	7	8	9	10
Transportation (400)	29	29	31	32	33	34
Community and Regional Development (450)	7	8	8	8	8	9
Education, Training, Employment, and Social Services (500)	31	30	32	33	35	36
Health (550)	32	35	38	41	44	48
Medical Insurance (570)	62	71	82	98	107	111
Income Security (600)	123	147	154	163	174	184
Social Security (650)	175	200	218	231	265	298
Veterans' Benefits and Services (700)	26	27	27	28	28	29
Administration of Justice (750)	6	6	6	6	7	7
General Government (800)	6	6	6	7	7	7
General Purpose Fiscal Assistance (850)	7	7	7	7	7	8
Net Interest (900)	108	127	145	168	195	219
Allowances (920)	1	1	3	5	7	9
Undistributed Offsetting Receipts (950)	-16	-34	-37	-39	-42	-46
Total	923	1,019	1,116	1,231	1,374	1,504
Memorandum:						
Social Security and Medicare	238	271	300	329	372	409

TABLE B-2. BASELINE OUTLAY PROJECTIONS BY FUNCTION
(By fiscal year, in billions of dollars)

	1984 Base	Projections				
		1985	1986	1987	1988	1989
National Defense (050)	235	263	295	331	372	419
International Affairs (150)	11	12	12	13	14	14
General Science, Space, and Technology (250)	8	9	9	9	10	10
Energy (270)	3	4	4	4	5	5
Natural Resources and Environment (300)	12	12	12	12	12	13
Agriculture (350)	10	12	15	17	18	21
Commerce and Housing Credit (370)	4	3	3	4	5	4
Transportation (400)	27	27	29	30	31	33
Community and Regional Development (450)	8	8	8	8	8	8
Education, Training, Employment, and Social Services (500)	28	29	30	32	33	35
Health (550)	31	34	37	40	43	47
Medical Insurance (570)	61	69	78	88	100	113
Income Security (600)	97	115	120	126	133	139
Social Security (650)	180	191	203	218	234	250
Veterans' Benefits and Services (700)	26	26	27	27	28	29
Administration of Justice (750)	6	6	6	6	7	7
General Government (800)	6	6	6	6	7	7
General Purpose Fiscal Assistance (850)	7	7	7	7	7	8
Net Interest (900)	108	127	145	168	195	219
Allowances (920)	1	1	3	5	7	9
Undistributed Offsetting Receipts (950)	-16	-34	-37	-39	-42	-46
Total	853	928	1,012	1,112	1,227	1,342
Memorandum:						
Social Security and Medicare	240	260	281	305	334	363

TABLE B-3. BASELINE CREDIT PROJECTIONS BY BUDGET FUNCTION
(By fiscal year, in billions of dollars)

		1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
International Affairs (150)	DL	8	9	11	12	13	14	15
	PG	9	9	9	10	11	11	12
General Science, Space, and Technology (250)	DL	*	*	--	--	--	--	--
	PG	--	--	--	--	--	--	--
Energy (270)	DL	5	5	5	5	5	5	6
	PG	*	*	*	*	*	*	*
Natural Resources and Environment (300)	DL	*	*	*	*	*	*	*
	PG	--	--	--	--	--	--	--
Agriculture (350)	DL	17	13	12	14	14	14	14
	PG	5	3	3	3	4	4	4
Commerce and Housing Credit (370)	DL	7	6	6	6	7	7	7
	PG	47	54	57	60	62	65	68
Transportation (400)	DL	*	*	*	*	*	*	*
	PG	*	*	*	1	1	1	1
Community and Regional Development (450)	DL	1	4	3	2	2	3	3
	PG	*	*	*	1	1	1	1
Education, Training, Employment, and Social Services (500)	DL	1	1	1	1	1	1	1
	PG	7	7	7	7	7	7	7
Health (550)	DL	*	*	*	*	*	*	*
	PG	*	*	*	*	*	*	*
Income Security (600)	DL	*	1	*	*	*	*	*
	PG	14	15	15	15	15	15	15
Veterans' Benefits and Services (700)	DL	1	1	1	1	1	1	1
	PG	15	19	23	27	30	33	35
General Purpose Fiscal Assistance (850)	DL	*	*	*	*	*	*	*
	PG	--	--	--	--	--	--	--
Total	DL	41	39	39	42	44	45	47
	PG	97	108	116	123	130	136	142

* Less than $500 million.

DL Net Direct Loan Obligations

PG Primary Loan Guarantee Commitments

TABLE B-4. BASELINE OUTLAY PROJECTIONS BY MAJOR PROGRAM CATEGORY
(By fiscal year)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
			In Billions of Dollars				
National Defense	210	235	263	295	331	372	419
Benefit Payments for Individuals							
Direct	357	366	389	414	445	480	514
Indirect	45	47	50	53	56	60	64
Subtotal	402	414	439	467	501	540	579
Grants to State and Local Governments	48	53	55	57	59	62	65
Net Interest	90	108	127	145	168	195	219
Other							
Other federal operations	80	75	78	85	92	100	108
Undistributed offsetting receipts	-34	-32	-34	-37	-39	-42	-46
Subtotal	46	43	44	49	53	58	61
Total Budget Outlays	796	853	928	1,012	1,112	1,227	1,342
Memorandum:							
Total Grants to State and Local Governments	93	101	105	110	116	122	129
			As a Percent of GNP				
National Defense	6.5	6.6	6.7	6.9	7.2	7.5	7.8
Benefit Payments for Individuals							
Direct	11.0	10.3	9.9	9.7	9.6	9.6	9.6
Indirect	1.4	1.3	1.3	1.2	1.2	1.2	1.2
Subtotal	12.5	11.6	11.2	11.0	10.9	10.8	10.8
Grants to State and Local Governments	1.5	1.5	1.4	1.3	1.3	1.2	1.2
Net Interest	2.8	3.0	3.2	3.4	3.6	3.9	4.1
Other							
Other federal operations	2.5	2.1	2.0	2.0	2.0	2.0	2.0
Undistributed offsetting receipts	-1.1	-0.9	-0.9	-0.9	-0.8	-0.8	-0.9
Subtotal	1.4	1.2	1.1	1.2	1.1	1.2	1.1
Total Budget Outlays	24.7	23.9	23.7	23.8	24.1	24.6	24.9
Memorandum:							
Total Grants to State and Local Governments	2.9	2.8	2.7	2.6	2.5	2.4	2.4

APPENDIX C. FEDERAL RECEIPTS AND EXPENDITURES IN THE NATIONAL INCOME ACCOUNTS

Both the unified budget and the federal sector of the national income accounts (NIA) measure the receipts and expenditures of the federal government. The national income accounts measure current income and production and are the most widely used indicator of current economic activity. As a rule, the unified budget is used for budgetary analysis while the NIA federal sector is more useful for analyzing the economic impact of federal government activity. This appendix explains the differences between the unified budget and the federal sector of the national income accounts and translates the unified budget projections given in the body of the report into NIA terms.

The NIA estimates of federal activity differ somewhat from those of the unified budget. Specifically, they vary in four areas: timing of transactions; netting and grossing of receipts against spending; treatment of financial activities; and coverage.

Timing differences occur because the unified budget records transactions (except interest owed to the public) on a cash-paid or cash-received basis, while the NIA federal sector may use a cash, accrual, or other basis, depending on the type of transaction. On the receipts side, the most important timing difference is the recording of corporate profit taxes in the NIA at the time the tax liability is incurred, which may be months (or years) before the money is deposited in the Treasury. On the expenditure side, the only major timing difference is the recording of some large defense purchases in the NIA at the time of delivery rather than at the time payment is made. Other timing differences are generally small.

Netting and grossing differences arise because the unified budget treats certain types of receipts as offsets to outlays. For example, receipts by the civil service retirement trust fund and other federal employee benefit plans of employer contributions are counted as a negative outlay in the unified budget, exactly offsetting agency expenditures elsewhere in the budget. In the NIA, this amount is added to both receipts and expenditures in order to provide a more accurate measure of social insurance taxes (on the revenue side) and compensation of employees (on the expenditure side). Other netting and grossing adjustments in the NIA are made for funds collected by the government in the course of business-type transactions-- such as veterans' insurance programs, timber sales, and rents and royalties arising from the Outer Continental Shelf leases.

Lending transactions that involve only the transfer of existing assets and liabilities are generally excluded from the NIA federal sector, since they do not reflect current production of goods or services. For example, direct lending by the Small Business Administration is reflected in the unified budget but is excluded from the NIA. Interest paid or received in the course of financial transactions, though, is reflected in the NIA federal sector. The NIA also records nonrecourse agricultural commodity loans as purchases of goods and services rather than loans.

Coverage differences largely reflect the exclusion of Puerto Rico, the Virgin Islands, and other territories from the United States for purposes of computing the gross national product and related data series in the NIA. The national income accounts, on the other hand, include certain foreign currency transactions and spending by certain off-budget federal entities that are excluded from the unified budget.

Estimates of federal-sector receipts and expenditures on an NIA basis, consistent with the CBO baseline budget projections, are shown in Table C-1.

TABLE C-1. PROJECTIONS OF BASELINE REVENUES AND OUTLAYS ON A NATIONAL INCOME ACCOUNTS BASIS
(By fiscal year, in billions of dollars)

	1983 Actual	1984 Base	Projections 1985	1986	1987	1988	1989
Receipts							
Personal Tax and Nontax Receipts	288	295	335	367	401	442	482
Corporate Profits Tax Accruals	55	73	78	88	99	102	103
Contributions for Social Insurance	229	257	290	320	346	382	414
Indirect Business Tax and Nontax Accruals	52	55	55	51	51	53	55
Total	624	679	759	826	896	980	1,055
Expenditures							
Purchases of Goods and Services							
Defense	197	218	247	277	312	352	397
Nondefense	80	75	94	99	105	115	123
Transfer Payments	344	352	374	398	429	461	495
Grants-in-Aid to State and Local Governments	86	92	96	101	107	113	119
Net Interest Paid	93	110	128	146	168	194	219
Subsidies less Current Surplus of Government Enterprises	21	21	15	16	17	18	19
Total	819	867	953	1,037	1,138	1,252	1,371

APPENDIX D. CHANGES IN BUDGETARY POLICIES SINCE JANUARY 1981

CBO is often asked, "What would your baseline budget projections look like if the changes in taxing and spending policies of the past three years had never taken place?" Like many straightforward questions, this one cannot be given an unqualified answer. First, while policies have changed, so has the economy. Separating the effects of changes in budgetary policies from changes in the economy requires making the unrealistic assumption that budgetary changes have had no effect on the economy, either directly or indirectly through, say, their influence on the conduct of monetary policy. Second, the pricing of policy changes depends upon the economic assumptions used. Should the changes be estimated using current economic assumptions or those used when the changes were enacted? A case can be made for either method.

Tables D-1, D-2, and D-3 provide CBO estimates of revenue and outlay projections based on current economic and technical assumptions but the policies of three years ago. For revenues and mandatory spending, 1981 policy is largely defined by the laws in effect on January 1, 1981. The treatment of discretionary spending is more difficult, however, since appropriations are generally made for only one year at a time. In the case of nondefense discretionary spending, the estimates use the 1981 CBO baseline, adjusted for subsequent changes in the actual or projected price level, as a measure of 1981 policy. In the case of defense, 1981 policy has been approximated by a path that provides 3 percent annual real growth in budget authority over the January 1, 1981, level.

The estimates differ somewhat from those published in last year's baseline projections report, both because of intervening policy changes and changes in the economic and technical assumptions. The basic picture, however, is the same. For example, CBO's baseline projection made in 1981 showed a surplus of $209 billion in 1986 (the last year of that projection). This year's baseline projection for 1986 is a deficit of $217 billion. Of the $426 billion change in the projected deficit or surplus, a little over one-third ($154 billion) results from legislative changes, and the remainder ($272 billion) from economic and technical differences, primarily changes in the economic assumptions. Table D-1 divides the legislative changes into four categories. Changes in tax law have resulted in net revenue reductions, which in 1986 amount to $152 billion. Nondefense spending in 1986 is $71 billion lower than it otherwise would have been, but this reduction is almost

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exactly offset by $42 billion in higher defense spending and $32 billion in increased debt-service costs resulting from the other legislative changes.

By 1989, the projected increases in defense spending and interest costs attributable to recent policy changes greatly exceed the cuts in nondefense spending. Without these spending increases, without the tax reductions enacted since 1981, and under the artificial assumption that these significant policy changes had no effect on the course of the economy or on other fiscal or monetary policies, the baseline projection for 1989 would show a surplus of $11 billion, as Table D-1 indicates. Table D-2 details the effects of the major pieces of tax legislation enacted since 1981. Table D-3 shows the policy changes affecting each major category of outlays.

TABLE D-1. EFFECT ON DEFICITS OF POLICY CHANGES SINCE 1981
(By fiscal year, in billions of dollars)

	1982	1983	1984	1985	1986	1987	1988	1989
Deficit (-) or Surplus Under Policies in Effect January 1, 1981	-109	-149	-111	-83	-63	-39	-17	11
Legislative Changes								
Tax reductions	-40	-73	-93	-117	-151	-180	-204	-239
Defense spending increases	-1	-17	-25	-36	-42	-54	-65	-77
Nondefense spending cuts	39	46	48	59	71	74	76	78
Effect of legislative actions on interest costs	*	-2	-9	-19	-32	-49	-72	-100
Total changes	-2	-47	-79	-112	-154	-209	-264	-337
Deficit Under Policies in Effect January 1, 1984	-111	-195	-190	-195	-217	-248	-282	-326
MEMORANDA:								
January 1981 baseline deficit (-) or surplus a/	-30	18	76	138	209			
Technical and economic differences between current estimate of deficit under 1981 policies and 1981 baseline	-79	-167	-187	-221	-272			

* Less than $500 million.

a. For 1981 baseline, see Congressional Budget Office, Baseline Budget Projections: Fiscal Years 1982-1986 (July 1981).

TABLE D-2. EFFECT ON REVENUES OF POLICY CHANGES SINCE 1981
(By fiscal year, in billions of dollars)

	1982	1983	1984	1985	1986	1987	1988	1989
Revenues Under Policies in Effect January 1, 1981	657	673	756	850	946	1,044	1,149	1,254
Legislative Changes								
Economic Recovery Tax Act of 1981	-40	-91	-135	-166	-210	-248	-282	-321
Tax Equity and Fiscal Responsibility Act of 1982	*	16	34	37	45	53	51	47
Surface Transportation Assistance Act of 1982	---	2	4	4	4	5	5	5
Social Security Amendments of 1983	---	---	6	9	9	11	22	30
Repeal of withholding of tax from interest and dividends	---	*	-3	-2	-2	-2	-2	-2
Other	*	1	*	1	3	2	2	2
Total changes	-40	-73	-93	-117	-151	-180	-204	-239
Revenues Under Policies in Effect January 1, 1984	618	601	663	733	795	863	945	1,016
MEMORANDA								
January 1981 baseline revenues a/	709	810	920	1,033	1,159			
Technical and economic differences between current estimate of revenues under 1981 policies and 1981 baseline	-52	-137	-164	-183	-213			

* Less than $500 million.

a. For 1981 baseline, see Congressional Budget Office, Baseline Budget Projections: Fiscal Years 1982-1986 (July 1981).

TABLE D-3. EFFECT ON OUTLAYS OF POLICY CHANGES SINCE 1981
(By fiscal year, in billions of dollars)

	1982	1983	1984	1985	1986	1987	1988	1989
Outlays Under Policies in Effect January 1, 1981	767	822	867	933	1,009	1,083	1,166	1,244
Legislative Changes								
National defense	1	17	25	36	42	54	65	77
Nondefense discretionary spending	-28	-27	-21	-27	-34	-35	-37	-38
Entitlements and other mandatory spending	-11	-17	-24	-29	-33	-34	-37	-36
Net interest	---	-1	-2	-2	-2	-2	*	-1
Offsetting receipts	---	-1	-1	-2	-2	-2	-2	-3
Effect of legislative actions on interest costs	*	2	9	19	32	49	72	100
Total changes	-38	-26	-14	-5	3	29	60	98
Outlays Under Policies in Effect January 1, 1984	728	796	853	928	1,012	1,112	1,227	1,342
MEMORANDA								
January 1981 baseline outlays a/	739	792	843	895	950			
Technical and economic difference between current estimate of outlays under 1981 policies and 1981 baseline	28	30	24	38	59			

* Less than $500 million.

a. For 1981 baseline, see Congressional Budget Office, Baseline Budget Projections: Fiscal Years 1982-1986 (July 1981).